

APX

ATARI® Program Exchange

Product Catalog
Fall Edition 1983
Price \$2.00

Consumer-
written
programs for
ATARI Home
Computers



If You Own ATARI, You Should Be Reading ANTIC!

ANTIC™ Magazine, The ATARI® Resource, covers ATARI computers, software, peripherals and game machines in depth.

EACH month ANTIC focuses on the awesome potential of ATARI. You'll learn about Education, Graphics, Communication, Sound and Music, Arcade and Adventure Games, and Data Bases, and that's only the beginning!

SUBSCRIBE to ANTIC and tap into the best source of up-to-the-minute information on the whole incredible world of ATARI.

From the heart of the Silicon Valley.

ANTIC Delivers ATARI!

GET The ATARI Resource Today!

- Send \$3 for sample copy to: ANTIC, 600 18th St., San Francisco, CA 94107.
- Call TOLL-FREE to start your subscription: 12 issues for \$24/ 24 issues for \$44/36 issues for \$60.
- 800-772-3545 x.133 in California, 800-927-1617 x.133 everywhere else
- Ask for ANTIC at your favorite computer store or newsstand.

Antic

The ATARI Resource

ANTIC™ is an independent monthly publication for ATARI owners and users. ATARI® is a registered trademark of Atari, Inc.



APX

Product Catalog

Fall 1983



Table of Contents

Order Forms	Centerfold
Index of programs	2
Order information	3
Current APX Hits	4-7
APX Fall Contest winners	8-9
Home Management programs	10-15
Personal Development programs	17-20
Learning programs	21-44
Entertainment programs	46-59
Systems/Telecommunications programs	60-71
Publications	72
Hardware	72
ALL ABOUT APX	
From the Editor	24
What is APX?	34
Contest Rules	34
Request form for a Program Submission	
Packet	Centerfold



On the Cover: The city map of GETAWAY!, the APX game of cops and robbers, covers 35 screens. Now a four-color GETAWAY! map measuring approximately 2 feet by 3 feet is available to guide you back to your hideout. The price is \$4.00; order number is APX-90012. Shown here is a section of the poster, the creation of the designer of the APX catalog, Jim McGuinness. On the back cover is the first APX advertisement to appear in magazines across the nation, also for GETAWAY!

Contest deadlines, October 1 marks the deadline for all program submissions to the APX winter contest. Entries submitted by that date will be eligible for the 1983 grand prize — \$25,000 in cash! And if the submission relates in some way to an approved Olympic sport, the programmer and a guest of his or her choice is also eligible to win an all-expense-paid trip for two to the 1984 Summer Olympic games in Los Angeles!

Peripheral Contest: Here's a contest for everyone. If you've never submitted a program to APX before, or if you're a bestselling APX author, you have a chance at some nifty prizes, including an annual best-of-all prize of \$5,000 in cash, in our new Quarterly ATARI Peripheral Contest. See the inside back cover of this issue for details.

Program availability: Programs are available at the prices listed in this catalog starting September 26, 1983.

Director: Fred Thorlin

Administrative assistant: Donna Bennett

Product review

Jack Perron, manager. John Cardozo, Mike Downie, Gene Plagge, Karen Stagnaro, Shirley Stas

Publications

Theo Przybyszewski, manager. Joanne Bahnsen, Christopher Caen, Merle Metcalfe

Sales and manufacturing

Al Thomas, manager.
Kyla Andini, Dana Bushnell, Skip Cramer, Stephen Janes, Mike Long, Mary Lorenzen, Teresa Lorenzen, Terry Manca, Steve O'Sullivan, Ernest Solorio

Designer: Jim McGuinness

INDEX

Home Management

- Atari/Writer Printer Drivers 10
- Aspell 11
- Bowler's Database 13
- Calculator 13
- Color Alignment Generator 10
- Data Base/Report System 13
- Data Management System 24
- Diskette Mailing List 14
- Enhancements to GRAPH IT 14
- Family Vehicle Expense 14
- Financial Asset Management System 14
- Home Inventory 11
- Home Loan Analysis 12
- Hydraulic Program 20
- Isopleth Map-making Package 20
- Real Estate Cash Flow Analysis 15
- Stock Management 15
- Strategic Financial Ratio Analysis 12
- Text Formatter 20
- Typit 15

Personal Development

- Advanced Musicsystem 17
- Astrology 17
- Banner Generator 20
- Blackjack Tutor 19
- Drawit 18
- Fingerspelling 19
- Going to the Dogs 20
- Jukebox #1 17
- Keyboard Organ 20
- Personal Fitness Program 19
- Piano Tuner 18
- Player Piano 19
- Video Kaleidoscope 20

Learning

- Advanced Fingerspelling 22
- Algebra¹ 41
- Atlas of Canada 33
- Calculus Demon¹ 41
- Circuit Lab 29
- Counter 27
- Cubbyholes 26
- Earth Science 32
- Easygrader 39
- Elementary Biology 32
- Escape to Equus 42
- Excalibur 21
- Flags of Europe 39
- Frogmaster 33
- Geography 32
- Hickory Dickory 33
- I'm Different 40
- Instructional Computing Demonstration 33
- Letterman 27
- Magic Melody Box 40
- Mapware 44
- The Market Place 32
- Math Mission 42
- Math*UFO 42
- Mathematic-Tac-Toe 42
- Metric and Problem Solving 32
- Midas Touch 40
- Monkey Up a Tree 25

- Morsecode Master 28
- Music I — Terms & Notations 33
- Music II — Rhythm & Pitch 33
- Music III — Scales & Chords 33
- Musical Computer — The Music Tutor 40
- Musical Pilot 22
- My Spelling Easel 28
- Number Blast 29
- Polycalc¹ 41
- Prefixes 32
- Presidents of the United States 30
- Punctuation Put-on 43
- Puzzler 23
- Ringmaster 25
- Spelling Genie 30
- Starware 44
- Teasers by Tobbs 26
- Text Analyst 33
- Three R Math Classroom Kit 41
- Three R Math Home System 42
- Typo Attack 25
- Video Math Flash Cards 42
- Word Search Generator 39
- Wordgo 43
- Wordmaker 39

Entertainment

- Air-Raid¹ 59
- Atari¹ 50
- Avantech 59
- The Bean Machine 51
- Blackjack Casino 59
- Black Buster 57
- Booleg 54
- Can't Quit 55
- Caterpiller 55
- Checker King 58
- Cribbage 59
- Dandy 49
- Diggerbonk 58
- Downhill 51
- Enumerate 53
- Galatad and the Holy Grail 56
- Game Show 59
- Getaway¹ 48
- Gridiron Glory 57
- Impact 59
- Ion Roadway 46
- Kangaroo 48
- Melt-Down¹ 59
- Memory Match 59
- Microsailing 56
- Moon Marauder 47
- Outlaw/Howitzer 52
- Phobos 49
- Quarxon 52
- Salmon Run 50
- Saratoga 47
- 747 Landing Simulator 58
- Seven Card Stud 54
- Smasher 53
- Snark Hunt 59
- Space War 46
- Terry 58
- Yahman 57

Systems/Telecommunications

- ATARI Pascal Language System 70
- ATARI Program Text Editor 69
- BASIC Program Compressor 71
- BASIC/XA 62
- Cartoonist 60
- Chameleon CRT Terminal Emulator 69
- Deep Blue C Compiler 64
- Deep Blue Secrets 64
- Disk Fixer/Load 'n Go 63
- Diskette Librarian 64
- Diskmenu 71
- Dunion's Debugging Tool 66
- Eastern Front Scenario Editor 61
- Eastern Front Scenarios 42/43/44 61
- Extended fig-FORTH 66
- Extended WSPN 68
- FORTH Turtle Graphics Plus 67
- fun-FORTH 67
- GTIA Demonstration Diskette 71
- Hex-a-Bug 65
- Insomnia 70
- Instedit (ATARI BASIC version) 65
- Instedit (Microsoft BASIC version) 65
- Keypad Controller 63
- Mantis 68
- Mapmaker 24
- Mathlib 60
- Microsoft BASIC Cross-reference Utility 71
- Music Player 71
- Player Generator 71
- Screen Dump Utility 63
- Source Code for Eastern Front 62
- Speed-O-Disk 71
- Supersort 63
- T: A Text Display Device 69
- Utility Diskette II 71

Publications

- De Re ATARI 72
- APX Product Catalog, spring 1983 edition 72
- APX Product Catalog, summer 1983 edition 72
- APX Product Catalog, fall 1983 edition 72

Hardware

- 48K RAM Expansion Kit 72
- DE-9S controller plug 72
- 5-pin DIN connector 72
- 13-pin I/O plug 72
- 13-pin I/O socket 72
- DA-15P 850 printer plug 72
- DE-9P 850 serial plug 72

¹ Indicates trademark of The Soft Warehouse

² Indicates trademark of Stephen Romejko

Ordering Information

APX products only. The ATARI Program Exchange handles orders only for the items described in this catalog. For all standard ATARI Home Computer products, including any software, hardware, or documentation mentioned in this catalog, see your local ATARI Computer retailer.

\$10 minimum order, plus shipping and handling charge. We'll fill orders of \$10.00 or more. Please add \$2.50 to your order to cover shipping and handling.

Mail Orders. To order by mail, fill out an order form and mail it, together with your payment, to the ATARI Program Exchange, P.O. 3705, Santa Clara, CA 95055.

Phone Orders. For faster service, phone in credit card orders, using our toll-free number, 800/538-1862 (or 800/672-1850 for calls within California). You can also call us at 408/727-5603. Telephone hours are Monday through Saturday, 7 a.m. to 5 p.m. PST.

Payment by check, money order, VISA, or MasterCard. Your payment must accompany all mail orders. Enclose a check or money order, or charge your order to your VISA or MasterCard account. Include the \$2.50 shipping and handling charge in your payment. California residents need to add 6.5% sales tax to the merchandise total, exclusive of shipping and handling.

No C.O.D. or purchase orders. We regret that we cannot accept orders paid by C.O.D. or by a purchase order.

Foreign orders. At present, we can handle orders only from the United States. Contact your ATARI supplier for more information.

Delivery to P.O. Box numbers. We normally ship your order by United Parcel Service (UPS). Because UPS doesn't deliver to P.O. Box numbers, please use a street address on your order form.

Alternate shipping method. Please indicate an alternate method of shipment if UPS doesn't deliver to your area.

DISCLAIMER OF WARRANTY ON APX COMPUTER PROGRAMS. Most APX Computer Programs have been written by people not employed by Atari. The programs we select for APX offer something of value that we want to make available to ATARI Home Computer owners. In order to economically offer these programs to the widest number of people, APX Computer Programs are not rigorously tested by Atari and are sold on an "as is" basis without warranty of any kind. Any statements concerning the capabilities or utility of APX Computer Programs are not to be construed as express or implied warranties.

Atari shall have no liability or responsibility to the original consumer purchaser or any other person or entity with respect to any claim, loss, liability, or damage caused or alleged to be caused directly or indirectly by APX Computer Programs. This disclaimer includes, but is not limited to, any interruption of services, loss of

business or anticipatory profits, and/or incidental or consequential damages resulting from the purchase, use, or operation of APX Computer Programs.

Some states do not allow the limitation or exclusion of implied warranties or of incidental or consequential damages, so the above limitations or exclusions concerning APX Computer Programs may not apply to you.

LIMITED WARRANTY ON MEDIA AND HARDWARE ACCESSORIES. Atari, Inc. ("Atari") warrants to the original consumer purchaser that the media on which APX Computer Programs are recorded and any hardware accessories sold by APX shall be free from defects in material or workmanship for a period of thirty (30) days from the date of purchase. If you discover such a defect within the 30-day period, call APX for a return authorization number, and then return the product to APX along with proof of purchase date. We will repair or replace the product at our option. If you ship an APX product for in-warranty service, we suggest you package it securely with the problem indicated in writing and insure it for value, as Atari assumes no liability for loss or damage incurred during shipment.

This warranty shall not apply if the APX product has been damaged by accident, unreasonable use, use with any non-ATARI products, unauthorized service, or by other causes unrelated to defective materials or workmanship.

Any applicable implied warranties, including warranties of merchantability and fitness for a particular purpose, are also limited to thirty (30) days from the date of purchase. Consequential or incidental damages resulting from a breach of any applicable express or implied warranties are hereby excluded.

The provisions of the foregoing warranty are valid in the U.S. only. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

No cancellations, returns, refunds, or credits. To keep our costs down, we accept no cancellations and no returns, except for defective media or for goods damaged in shipment. We give no refunds or credits.

Goods damaged in shipment. If your order arrives damaged, please call one of our toll-free numbers within seven days after receiving your order. Have your packing slip at hand and ask for a return authorization number. Do not return a program to APX without this number.

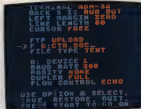
Right to make changes. We reserve the right to make price and availability changes in the products described in the APX catalog at any time and without notice.

Current APX Hits



GETAWAY!
by Mark Reid

Find the loot and stash it before the law nabs you! Your getaway car races across a city that covers 35 screens. See page 48



CHAMELEON CRT TERMINAL EMULATOR

by John Howard Palevich

Convert your computer to a Glass TTY, ADM-3, or VT-52 terminal. Features include 80 columns, 24-character line display and previous page column buffer. See page 69



SPELLING GENIE
by Dale Disharoon

Four spelling games filled with magic and whimsy also offer excellent practice in spelling and word recognition. See page 30



TYPO ATTACK
by David Buchler

Type the right character and destroy the Typos — a great way to practice your touch typing! Nine levels of skill. See page 25



COUNTER
by Al Casper

An introduction to numbers in four languages. Captivates younger children with color, sound and action. See page 27



VIDEO MATH FLASH CARDS
by Richard S. Waller

Timed math drills provide no-stress practice, the chance to retry problems missed earlier, and a ranking up to Math War! See page 42



EXTENDED fig-FORTH
by Patrick Mullarky

Full implementation of the increasingly popular programming language with more definitions (for advanced programmers). A good development tool for applications that require high speed and low memory consumption. See page 66



NUMBER BLAST
by Richard Witala

Practice solving addition and multiplication problems by "blasting" to the answer more quickly than your opponent. See page 29



DEEP BLUE C COMPILER
by John H. Palevich

C — more powerful than BASIC, less error-prone than assembly language, transportable. This compiler helps you create large programs with C. See page 64

Current APX Hits



SEVEN CARD STUD
by Monty Webb

Play poker against five opponents, each having four programmable playing traits. An instant all-night poker game! See page 54.



INSTEDIT
by Sheldon Leemon

The best character set editor we've ever seen. INSTEDIT can help you make maximum use of the advanced graphics capabilities of your ATARI Home Computer. There's also a Microsoft BASIC version. See page 65.



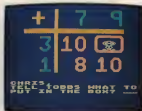
DOWNHILL
by Mark Read

Time to hit the powder! Pick a slope, select your speed, and race against the clock to get to the bottom of the slope without hitting a tree or missing a gate. Thrills without chills, and no broken bones! See page 51.



SALMON RUN
by Bill Williams

Help Sam the Salmon reach his lady love! You guide him upstream, leaping up waterfalls, steering clear of bears, fishermen, and seagulls in a race against time. See page 50.



TEASERS BY TOBBS
by Thomas C. O'Brien and
Sunburst Communications

Tobbs is an imp! Bill has boxes with correct answers to math problems. He's glad when you're right, but he shakes his head firmly when you're wrong. Adults are challenged and charmed too. See page 26.



ATARI PASCAL LANGUAGE SYSTEM

ISO PASCAL with many enhancements tailored to the needs of advanced PASCAL programmers. See page 70.



MAGIC MELODY BOX
by W. Wes Horlacher

You've always wanted to write a song, right? But you can't read music, right? Well, now you can be Cole Porter! Create a four-voice harmonized song in just two steps. You design the melody line, the program does the rest. See page 40.



QUARXON
by Scott Ludwig

The enemy is attacking — defend the droids! Quarxon's strange atmosphere makes direct fighting difficult: your own laser fire could become your downfall! See page 52.



KEYBOARD ORGAN
by Alan Griesemer and
Stephen Bradshaw

Turn your ATARI Home Computer into a simple organ! Vibrato and attack features can modify the sound. Record and play back your music, even play both parts of a duet! See page 20.

Current APX Hits



DANDY

by John H. Palevich

Up to four can play together to get to the 26th dungeon, but even then the game's not over—you can design your own dungeons. Share the frenzy and the fun! See page 49



MY SPELLING EASEL

by Al Casper

Paint landscapes on your computer by typing letters and spelling words. An introduction to spelling that children ages 5 to 10 love! See page 28



ASTROLOGY

by Harry Koons and Art Prag

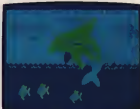
Now you can plot your exact horoscope with each planetary sign in its proper place and with all aspects listed. See page 17



ENHANCEMENTS TO GRAPH IT

by Howard D. Siebbeck

If you own the ATARI GRAPH IT program, these enhancements will allow you to save your work and redisplay it later and select degrees or radians for plotting trigonometric functions. See page 14



DRAWIT

by James Burton

Use up to 16 different colors and eight different boxes to create and save up to nine pages of drawings. Features include automatic fill, page merging, two zoom levels for detail work, page wipes, and an animator. An extraordinary program. See page 18



MONKEY UP A TREE

by Joe Grande

Give the monkey a boost to the bananas with the correct answer to the problem. Degree of difficulty is automatically determined by how quickly and accurately problems are solved. But if you wait too long or give the wrong answer, the monkey slides back a bit. See page 25



747 LANDING SIMULATOR

by William J. Graham

"The captain is unconscious! You must land the plane!" In the movies, it's a piece of cake. This fascinating, complex simulation provides all the frustration, anxiety, and danger of landing a big bird. See page 58



BLOCK BUSTER

by Alan Griesemer and Stephen Bradshaw

The classic cube puzzle — but this one lets you see all six sides at once! Use it to solve a cube you're stuck on, or to scramble up cubic hours of unpuzzling. See page 57



CUBBYHOLES

by Dale Disharoon

More than 500 puzzle combinations make CUBBYHOLES an endless challenge! It's a great two-player game that also sharpens math skills, concentration, and analytical abilities. See page 26

Current APX Hits



LETTERMAN

by Ed Stewart and Ray Lyons

Is it N or M? You have six chances to guess the word, one letter at a time! If you don't guess in time, Willie's son, little Showan Tell, doesn't get to eat the apple he brought to the archery school picnic. Nearly 400 words to guess at! See page 27



ATSPELLER

by R. Stanley Kistler

Brush those spelling demons to bogeyland! ATSPELLER checks your diskette text file against a dictionary file of 30,000 words. You can also create your own file of words. Questionable words can be highlighted on screen or printed on paper. See page 11



ATTANK!

by Joel Gluck

A deluxe version of the standard tank game, loaded with playing options, even two handicap features that make for an even match between novice and expert. And the battlefield changes every game. Almost unlimited variations in play and strategy. See page 50



OUTLAW/HOWITZER

Two games as one! Sharpen your marksmanship in a gunfight in the old west, or in a tank on the battlefield. Both games use colorful, action-packed graphics and sound effects. For one or two players. See page 52



AVALANCHE

by Dennis Koble

Look out! Six layers of rocks are falling on your head! Your shields are all you've got to protect yourself. Great use of color, graphics, and sound. A one- or two-player game. See page 59



HEX-A-BUG

by David Kano

An easy-to-use tool for stopping your program to find and correct bugs. Well-designed screens provide easy access to information. See page 65



BLACKJACK TUTOR

by W. H. Northrup

A fun-to-play tutorial designed to increase your mastery of blackjack playing and betting strategy. The computer is your dealer, but you set the pace. See page 19



PHOBOS

by Greg Christensen

Renegade marines have set up a command center on the closest moon of Mars. You must stop them. Blow up fuel dumps, duck energy rays, wipe out missile stockpiles as you fly downward into the increasingly colorful depths of Phobos. High excitement from the designer of CAVERNS OF MARS! See page 49



GALAHAD

by Douglas Crockford

Your mission is a sacred one: find the Holy Grail. You must battle monsters, evil knights, dragons, and despair! A spellbinding adventure full of color and surprise! See page 56

APX Fall Contest Winners

1ST PRIZE

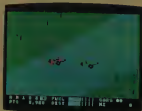
Home Management



COLOR ALIGNMENT GENERATOR by Don Lee

Use your computer to correct your TV's picture. Clear instructions and on-screen patterns and graphs guide you through the process step by step. See page 10.

Consumer



ION ROADWAY by Jim Sommers

You alone must master the joystick control of the I-Car, gain points by spinning out, navigate past dangerous robot cars, and never miss a chance to refuel! See page 46.

2ND PRIZE

NOT AWARDED
THIS QUARTER

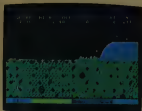


SARATOGA by Paul Wehner

The year is 1777. You command the American forces, destroy the Redcoats by year end and retain control of Albany, Philadelphia, West Point, and Fort Ticonderoga. Eight scenarios! Games in progress can be saved. See page 47.

3RD PRIZE

NOT AWARDED
THIS QUARTER



MOON MARAUDER by Stephen Romejko

Destroy the alien bases on the moon and save the Earth! You control the altitude and direction of your ship. See page 47.

APX Fall Contest Winners

Learning

1ST PRIZE



PUZZLER

by Paul Lewandowski

Your child can work as many as 20 different brightly colored puzzles! Use the joystick to place the pieces — no penalty for mistakes, and a record of tries is kept to mark improvement! See page 23.

Systems/Telecommunications



CARTOONIST

by Bryan Talbot

Use your Atari Home Computer to create characters and put them into action. Programmers can add animated sequences to programs, and children can discover the world of animation. See page 46.

2ND PRIZE



RINGMASTER

by Gregor Novak

Elephants, camels and a show-off monkey teach multiplication tables under the big top! You set the level of difficulty. Bright colors and lively music make learning fun. See page 23.



by Frank Paris

MATHLIB is a whole library of math functions designed to expand your DEEP BLUE C COMPILER in to the area of floating point calculations. Recommended for programmers familiar with DEEP BLUE C. See page 60.

3RD PRIZE



MUSICAL PILOT

by Charlie Kulas

Pilot your plane through the notes of a song. Each note is a balloon that pops when your plane flies through it. Helps children learn relationship between sounds and notes, but first of all, it's fun! See page 22.

NOT AWARDED
THIS QUARTER

Home Management



ATARIWRITER™ PRINTER DRIVERS

Recommended for owners of AtariWriter™ and printers other than the ATARI 825™ and ATARI 1025™
Written in machine language

Adapt the AtariWriter™ Word Processor for use with several printers

Everyone's impressed with the new AtariWriter™ Word Processor because it's so versatile and easy to use. But until now, unless you had an ATARI 825 or ATARI 1025 printer, it was hard to use this powerful word processing system. With this printer driver program, you can adapt several other kinds of printers to AtariWriter™.

It's easy to prepare your diskettes. You just copy a file, using DOS, from the printer driver diskette onto your text diskette, renaming it AUTORUN.SYS, and from then on, you can use that text diskette with your printer. Each time you load your text diskette into computer memory, the printer driver routine loads along with it. There's less computer memory available to you, but the manual shows you how to deal with large text files.

You can use AtariWriter™ Printer Drivers with the following brands and model numbers of printers:

ATARI 1020™ and ATARI 1027
EPSON FX-80, MX-80 and MX-100
EPSON MX-80 GRAFTRAX and MX-100 GRAFTRAX
EPSON MX-80 FT III and MX-100 FT III
GEMINI-10
NEC-8023A
PROWRITER-8510

The manual shows you how to adapt the word processor's special functions to each individual printer.

REVIEW COMMENTS

If you own a printer other than the ATARI 825 or ATARI 1025, this set of drivers makes it easy to use the fine AtariWriter™ word processor. However, it doesn't always allow access to special printer features, such as subscripts and superscripts.

REQUIRES

AtariWriter™ Word Processor cartridge
Diskette(s) containing text files
Printer (listed above)

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	24K	\$24.95	APX-20223



COLOR ALIGNMENT GENERATOR

by Don Lee

Recommended for ages 17 and up
Written in BASIC

Use your computer to correct your TV's picture

How many times on your TV have your green Martians been off-blue, your orange sunsets a pale shade of pink? The color alignment is sometimes off, and you're left with a poor excuse for a color TV. Now with this program you can use your computer to correct this color deficiency without having to surrender your TV to the repairman.

The program guides you through the process step by step in the manual. On the screen, it displays a set of color and black and white patterns and graphs, while the manual describes how to use them to perfect your TV reproduction. Using several easily recognizable controls, you can quickly correct any problem in the color quality or alignment. An electrician or electronics student can use the included NTSC American standard color bars and patterns. No matter what your electrical proficiency, this program can help you achieve better TV reception.

REVIEW COMMENTS

This program, with an easy-to-follow manual, lets the user adjust his or her TV at home, or tell if it needs to be taken into the shop for adjustment.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	24K	\$19.95	APX-10222
Diskette	32K	\$19.95	APX-20222

For credit card orders, use these toll-free numbers: 800/672-1850 (California) or 800/538-1862 (elsewhere in Continental U.S.A.). Or phone direct: 408/727-5603.



Home Management



HOME INVENTORY

by RLM Micro Systems

Recommended for ages 15 and up
Written in BASIC and machine language

Protect your property by recording vital information

You've devoted time, effort, and money to acquiring your possessions, and you've insured your valuables against loss or damage. But, have you recorded the information required by your insurance company for reimbursement? For each item, HOME INVENTORY lets you keep track of a name, type, description, serial number, date purchased, and purchase price. You can store information for up to 1200 items on a single diskette, and you can use as many diskettes as necessary to record all your possessions.

HOME INVENTORY is very easy to use. Color-coded screens and simple messages guide you through entering the information for each item, for locating selected items, and for printing complete or condensed inventory lists of all or selected items. You can also erase or revise information for items at a later date. Then, after you record all your valuables, you can store a copy of the diskette containing your records in another location, such as a bank safety deposit box or a friend's home. No one wants to face loss or destruction of property, but with HOME INVENTORY, if disaster strikes, at least you're prepared with the information needed to get restitution from your insurance company.

The authors invite questions and comments by mail and telephone.

REVIEW COMMENTS

This program is easy to understand and use. The color-coded screens help you keep track of where you are, and numerous messages ensure you don't accidentally lose information.

REQUIRES

ATARI BASIC Language Cartridge
Diskette(s) for storing records

OPTIONAL

ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$24.95	APX-20214



ATSPELLER, Rev. 2

by R. Stanley Kistler

Recommended for ages 12 and up
Written in machine language

Check your documents for correct spelling

How can you look a word up in the dictionary if you can't spell it? At last there's an answer to the perplexing problem of English spelling. ATSPELLER takes any diskette text file produced by such word processors as TYPET, the ATARI Word Processor, or any other word processor that creates ATARI DOS-compatible files, and checks it against a dictionary file of more than 30,000 words. If that's not enough, you can create your own dictionary file with even more words. You can have the questionable words highlighted on your TV screen or printed on paper. You can edit as you go along, replacing the incorrect word or leaving it as it is. Finally, if you have too many errors, ATSPELLER can write a new file for you. ATSPELLER takes the drudgery out of proofreading, and gives you confidence that your documents aren't marred by spelling and typing errors.

REVIEW COMMENTS

This is a first for Atari. The author worked on and tested ATSPELLER for more than a year before submitting it to APX.

Rev. 2 can be used with only one disk drive, and it has expanded dictionary capabilities.

REQUIRES

Diskette(s) containing text files

OPTIONAL

ATARI printer or equivalent printer
A second Atari 810 or 1050 Disk Drive

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	48K	\$39.95	APX-20191



Home Management



HOME LOAN ANALYSIS

by Jim Skinner

Recommended for adults
Written in BASIC

Evaluate loan alternatives

You're ready to buy a house, but you don't know the appropriate price range. You want your payments to be no more than \$750 per month, and you want to finance the loan for 30 years to buy as large a house as possible. If the current interest rate is 14.5 percent, what's the maximum purchase price you can afford?

You want to make improvements to your house that will cost \$5,000. You can borrow the money at 16 percent for five or ten years. Which time period would be better?

HOME LOAN ANALYSIS can help you answer these and other kinds of questions related to loans that use an amortization schedule, including mortgages and most automobile loans. You need enter only some combination of interest rate, original purchase price, down payment, balloon payment, and number of years for the loan. HOME LOAN ANALYSIS can then calculate monthly payments, maximum purchase price, appreciation rates, resale values, and amortization schedules. By changing one item, such as interest rate, you can quickly see its effect on the other figures. And you can display the analyses on your TV screen or print them. Can you afford a home improvement loan? Should you refinance your first mortgage or take out a second mortgage? What is the effect of various balloon payments on your regular monthly payment? What will your home be worth ten years from now? With HOME LOAN ANALYSIS, getting the answers to these questions makes evaluating all your options a snap.

The author invites written questions and comments.

REVIEW COMMENTS

This program is easy to use, informative, and well designed. It will calculate a schedule for specific years. The manual clearly presents many useful examples.

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX-10207
Diskette	24K	\$24.95	APX-20207



STRATEGIC FINANCIAL RATIO ANALYSIS

by Richard K. Lindgren

Recommended for investors and students
Written in BASIC

Evaluate a firm's performance and management strategies

Investors use financial ratio analysis to assess the performance of a company. You supply information from published financial statements, such as annual reports. STRATEGIC FINANCIAL RATIO ANALYSIS computes ratios that measure a firm's profitability, liquidity, and use of debt.

You can also use the program to interpret a management's business strategies, not always evident from looking at numbers alone. STRATEGIC FINANCIAL RATIO ANALYSIS can help uncover these strategies by presenting a set of key ratios in a format that demonstrates how each factor contributes to the company's success or failure. You can also use the program for "what if" analyses to evaluate the impact of a possible business decision on future performance.

The program guides you through entering the necessary data, which you can save for future use. Because you can work with two sets of information at a time, you can compare information on two different companies or information for two different time periods for one company. You can request as many as 30 different ratios for these two sets, and display or print them in a special format that illustrates their strategic relationships. For quick recall, the program also contains a glossary of all the ratios. With STRATEGIC FINANCIAL RATIO ANALYSIS, you'll spend less time computing and organizing your results than you do now, and you'll have more useful information at your disposal.

The author invites written questions and comments.

REVIEW COMMENTS

This program is easy to use and it's good at helping you avoid making mistakes. The user manual is clear and thorough.

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

ATARI printer or equivalent printer
Diskette(s) for storing data

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$24.95	APX-20217

Home Management

DATA BASE/REPORT SYSTEM

by James W. Burley

Recommended for experienced data base users
Written in BASIC and machine language

If you've ever used a data base manager on a large computer system, you'll appreciate the features of DATA BASE/REPORT SYSTEM. This general purpose system creates and maintains records having a maximum length of 255 characters. You can store about 1300 records having a five-character key on a system with 40K of memory.

You use the program to create a file, add, update, and remove records, sort the file, and print reports. Other programs redefine files by adding fields, modifying field sizes, or changing old field headings. The report writer lets you modify the order in which fields print, sum up numeric fields, and find your records using optional keys.

REQUIRES

ATARI BASIC Language Cartridge
DOS 2-formatted diskette(s) for data

OPTIONAL

ATARI 825 80-Column Printer or Epson printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$24.95	APX-20134

CALCULATOR

Recommended for ages 15 and up
Written in machine language

Now you can use the best qualities of a calculator on your ATARI Home Computer. CALCULATOR contains 145 functions, from simple arithmetic to programming commands that let you write your own programs. You can also work complex conversions and watch the stack and memory displays. Once CALCULATOR automatically loads into memory, you can choose five categories: conversions, fundamental functions, algebraic and trigonometric functions, statistical functions, and financial functions. After you've finished your calculations, you can print your results. Other commands let you store and retrieve programs as well as data. The stack and

memory displays share the center of the screen. Along the bottom of the screen is a space for your entries. You can store these entries in memory. A scroll area above the prompt line displays your last seven entries.

REQUIRES

No required accessories.

OPTIONAL

An ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	24K	\$29.95	APX-20130

BOWLER'S DATABASE, REV. 2

by Jerry White

Recommended for bowlers
Written in BASIC

BOWLER'S DATABASE is a friendly program for keeping track of your bowling scores. You enter your weekly scores for your first, second and third games, using a separate diskette or cassette for each bowler. You can request summary and detailed reports. The summary report contains your highest, lowest, and average scores bowled in the first, second, and third games, your highest, lowest, and average three-game series, and overall average. The detailed report lists all game and individual series totals by week.

BOWLER'S DATABASE gives you detailed records of your bowling performance, making comparisons from one season to the next, or from one league to another. Revision 2 lets you store scores greater than 255, and contains a display change.

REQUIRES

ATARI BASIC Language Cartridge
Additional diskettes for storing data

OPTIONAL

ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$17.95	APX-10091
Diskette	24K	\$17.95	APX-20091



Home Management

DISKETTE MAILING LIST

by William Bartlett

Recommended for ages 16 and up
Written in BASIC and machine language

DISKETTE MAILING LIST can handle lists having as many as 127 units of information (fields), with each unit as large as 120 characters. The number of records a file can contain is limited only by available diskette space, not memory.

You select program functions from menus. First you define the kinds of information you want to include in the records for a file, and then you add the records themselves. You can revise, add, and remove records as needed. You can sort and re-sort your records by any combination of fields. And you can print your records according to your specifications. Each record prints on one line, and you can also create custom-tailored mailing labels accommodating single and multilabel forms.

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

ATARI 825 80-Column Printer or equivalent

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	16K	\$24.95	APX-20112

FAMILY VEHICLE EXPENSE

by Jerry Falkenhan

Recommended for ages 18 and up
Written in BASIC

With FAMILY VEHICLE EXPENSE, you can keep track of six vehicles in nine expense categories, using your own blank diskettes to store data on.

The program uses a series of menus to review, enter, change, or delete information on one or all of your cars in any month. It lets you record twelve fuel entries per vehicle per month, and if you enter your odometer readings for at least two fill ups, the program calculates your cost per mile and miles per gallon for each vehicle for each month. You can use the print option at any time to create copies of your entries or to obtain summary reports.

REQUIRES

ATARI BASIC Language Cartridge
DOS 2-formatted diskette(s) for storing data

OPTIONAL

ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$24.95	APX-20128

ENHANCEMENTS TO GRAPH IT*

by Howard D. Siebenrock

Recommended for ages 12 and up
Written in BASIC

If you own the ATARI GRAPH IT program, you know you can create your own pie graphs, bar charts, and different plots on your TV screen, and you can use your Joystick Controller to find values of specific points on the plots. ENHANCEMENTS increases the usefulness of GRAPH IT. With ENHANCEMENTS you can save your work on diskette or cassette and later re-display it. The program also lets you select degrees or radians for plotting trigonometric functions, and the function you use displays below the plot.

Incorporating these features into GRAPH IT is simple. From then on, you use these enhanced GRAPH IT programs as you would the original versions, except that you now have additional features readily available.

REQUIRES

ATARI BASIC Language Cartridge
ATARI 410 or 1010 Program Recorder
GRAPH IT (CX4109)

OPTIONAL

One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$17.95	APX-20074

*Indicates trademark of Atari, Inc.

FINANCIAL ASSET MANAGEMENT SYSTEM

by Robert A. Waldman

Recommended for ages 16 and up
Written in BASIC

The FINANCIAL ASSET MANAGEMENT SYSTEM helps you evaluate the status of all your holdings by creating records for each asset and producing printed reports. Your assets can be of any type, and you can track as many as 99 different assets per file, creating as many files as you need. The system values your portfolio and prints three kinds of reports. One orders all your assets in a file alphabetically and lists each asset's yield, profit, and annual payout. This report also prints subtotals by asset types. The second report sorts all your assets into different lists: value, profit, payout, yield, and percent profit. The third tabulates all your dividends and interest paid on a year-to-date basis. You can also print data input forms to record information manually.

REQUIRES

ATARI BASIC Language Cartridge
ATARI 825 80-Column Printer only

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$29.95	APX-20042

Home Management

REAL ESTATE CASH FLOW ANALYSIS

by Richard K. Lindgren

Recommended for real estate investors

Written in BASIC

With REAL ESTATE CASH FLOW ANALYSIS, you can make decisions about real estate, but leave the number-crunching to your computer.

The program consists of three sections that analyze the costs and benefits of income-producing property. The Data Editor guides you in compiling, documenting, and modifying relevant analysis data. The Cash Flow analysis section computes before-tax and after-tax cash flows, profitability measures, and projected net worth for an investment property. The Amortization section computes monthly payments, interest rates, principal amounts, and terms for self-amortized loans. You can print all the analyses.

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

ATARI 825 80-Column Printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$24.95	APX-20169

STOCK MANAGEMENT

by Greg Thrush

Recommended for ages 18 and up

Written in BASIC

With STOCK MANAGEMENT, you record the information from your trade confirmation receipts once. The program then takes care of all your record-keeping chores and performs analyses.

A series of menus and prompts guides you through entering and updating information for these transactions: buy, sell, dividends, stock dividends, stock splits, and nontaxable distributions. For each transaction you record the stock, its symbol, the transaction type and date, the exchange, and the price/dividend, quantity, and commission. The program updates your file whenever you add information, and you can then print several kinds of reports: lists, current status including current value of each stock, summary of all transactions, and a capital gains summary in a given year.

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

ATARI 825 80-Column Printer or Epson 80-Column Printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$24.95	APX-20147

TYPIT

by Charles E. Balthaser

Recommended for any typist

Written in assembly language

TYPIT turns your computer into a typewriter, keeping the editing features of a word processor, but eliminating the complex code symbols.

A page of text appears on the screen just the way it will on the printed page. Each line is as long on the screen as it's going to be on the page. There's no "wraparound." A signal sounds when you are at the end of a line. To help you visualize how each page is going to look, TYPIT displays a dotted line every 65 lines, to show the bottom of an 11-inch piece of paper. The seventeen editing commands are short and simple. With a 48K system, you have room for about four pages. You can save on diskette anything you write with TYPIT.

REQUIRES

ATARI 825 80-column printer or equivalent printer

OPTIONAL

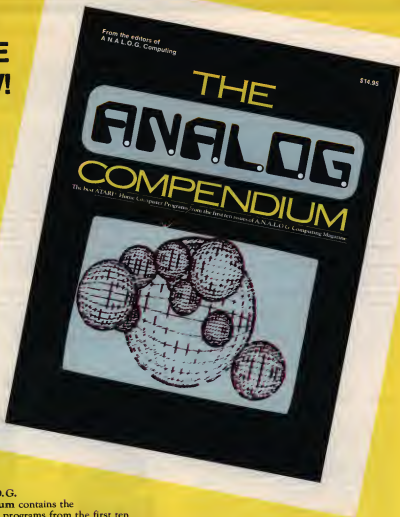
Diskette(s) for storing documents

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	24K	\$17.95	APX-20192



ON
SALE
NOW!



The **A.N.A.L.O.G. Compendium** contains the best ATARI programs from the first ten issues of **A.N.A.L.O.G. Computing Magazine**, including new material not previously published. It is packed with utilities, educational and business programs, including an updated version of Tony Messina's "Disk Tool." And, to top it off, The **Compendium** contains the best game programs ever published in any magazine, including *Maniac*, *Stuntman* and the **A.N.A.L.O.G.** favorite, *Fill 'Er Up!* (All shown opposite page, top.)

The **A.N.A.L.O.G. Compendium** is available at selected book and computer stores, or you can order it direct. Send a check or money order for \$14.95 + \$2 shipping and handling to:

A.N.A.L.O.G. Compendium
P.O. Box 615
Holmes, PA 19043

Or you can order by phone with MasterCard or VISA. Call toll free: 1-800-345-8112 (in PA, call 1-800-662-2444).

For orders outside the U.S., add an additional \$5 air mail, \$2 surface.

SUPPLIES ARE LIMITED, SO ORDER YOUR COPY TODAY!

Personal Development



ADVANCED MUSICSYSTEM

by Lee Actor

Recommended for ages 11 and up
Written in BASIC and machine language

With the ADVANCED MUSICSYSTEM, you can use your musical skills, from listening to creating, to their fullest.

You select your activity from a menu of fourteen choices. The editing function is one of the most interesting. You enter a musical note by specifying its parameters. Every time you enter a note, the program reproduces it through the television speaker and displays it on the screen, where it can be modified. You can listen to as many as four independent voices in a 5½-octave range and watch a piano keyboard playing the notes with each of the four voices appearing in a different color. Built-in synchronization functions let you construct a tape with at least eight simultaneous voices using an external tape recorder. ADVANCED MUSICSYSTEM lets you save music on a diskette, and merge files to create very large files.

REQUIRES

ATARI BASIC Language Cartridge
DOS 2.4-formatted diskette(s) for storing music

OPTIONAL

One set of ATARI Paddle Controllers
Stereo cable
Tape recorder

PAL

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$29.95	APX-20100

JUKEBOX #1

by Lee Actor

Recommended for ages 6 and up
Written in BASIC and machine language

Created with the help of ADVANCED MUSICSYSTEM, JUKEBOX #1 turns your ATARI Home Computer into a record player you set and forget. A selection of eight quality classics fills JUKEBOX #1.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$17.95	APX-20135



ASTROLOGY

by Harry Koons and Art Prag

Recommended for ages 14 and up
Written in BASIC

Draw astrological charts based on birth date and birthplace

Ptolemy and Morinus, the famous Greek astrologers, had a much harder time computing the locations of the sun, moon, and planets than you will. With ASTROLOGY, the mysteries of the zodiac, planetary positioning, natal charts, and rising signs will unfold in your very own living room.

Once the program loads, enter the exact time and place of birth. Then designate the location as geographical coordinates. If you don't know this information, ASTROLOGY computes it as you move the cursor across either a world or United States map to your birthplace.

After you've typed in the time (to the minute), date, and location of birth, ASTROLOGY takes over. The program processes your data and draws an astrological chart on the screen representing the earth, the zodiac, and the twelve astrological houses at the time of birth. Symbols of the zodiac appear on the lines (cusps) between each house. Each planetary sign is displayed in its proper house. ASTROLOGY also computes the relationships (aspects) of the planets in the houses. The program defines symbols for planets and signs of the zodiac on a separate screen.

Once you have your complete chart, some simple interpretations are available in the manual.

The authors invite written questions and comments.

REVIEW COMMENTS

The user manual includes suggested reading material for further astrological information. You do need additional reference material for a complete interpretation.

Can save charts on diskette, or print the chart with an appropriate printer and printing program.

REQUIRES

ATARI BASIC Language Cartridge

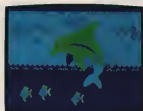
OPTIONAL

Diskettes for storing charts
Printer capable of printing graphics

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$24.95	APX-20078

Personal Development



DRAWIT

by James Burton

Recommended for ages 8 and up
Written in machine language

An extraordinary drawing tool

There are many drawing programs available for ATARI Home Computers. DRAWIT stands out from the crowd because of its well chosen, easy-to-use features and its ability to turn your creations into both a "slide show" for which you control the timing and an automatic message cycling system.

With DRAWIT and 48K of computer memory, you can create up to nine pages of multicolored drawings in memory at a time; with 16K of memory, you can create one page, and with 32K of memory, you can create five pages. Using four color pens, you can choose from sixteen different colors and eight different hues. You can easily draw outlined and solid circles, lines, boxes, different sized text, and freehand sketches. DRAWIT also has a fill feature, along with design relocation, page merging, and two zoom levels for detail work.

You can use your drawings in several ways. For example, DRAWIT includes a program that lets you incorporate your drawings into BASIC programs. And with DRAWIT's animator feature, you can combine pages in imaginative ways, such as fading one page into another or creating page wipes from any of four directions. Or you can turn your ATARI Home Computer into a visual aid for presentations or into an automatic sales or demonstration device. The diskette version includes an animation demonstration.

The author invites questions and comments by mail and telephone.

REVIEW COMMENTS

DRAWIT is easy to learn and use, and has many features, such as entering letters of any size, a choice of cursor form and speed, and the ability to load screens from BASIC. The animator demonstration is wonderful.

REQUIRES

One ATARI Joystick Controller

OPTIONAL

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$39.95	APX-10209
Diskette	16K	\$39.95	APX-20209



PIANO TUNER

by R. J. Morgan

Recommended for ages 16 and up
(with knowledge of music and piano)
Written in BASIC

Learn piano tuning, tone generation, and ear training

If nobody wants Sam to play it again any more, maybe it's the piano. Keeping this delicate instrument in tune is a difficult but critical part of maintaining it in good condition. PIANO TUNER incorporates the sound capabilities of your ATARI Home Computer to help you learn the procedure and skills you need for this task.

The "tuning procedures" section of the program guides you through the steps to do a general tuning. It prints instructions and illustrations for each step. Then it sounds the tones you need to adjust your piano.

Select the "single tones" option to generate any of the 88 possible pitches on a piano. Each note is listed on the screen, and you use a joystick to select the one you want. Hold down the joystick button to listen to that tone.

To sharpen your skills as a tuner, choose "ear training." You select one pitch, and the program produces another within fifteen cycles per second of the first. Use the joystick to increase or decrease the pitch of the second tone. When you've matched the first tone, you no longer hear the "best" sound that indicates a difference. Practice makes perfect!

The author invites written questions and comments.

REVIEW COMMENTS

This program doesn't replace the services of a professional piano tuner. The graphic representation of the piano strings is good, and the tuning procedure is easy to follow. It's useful for the piano owner who wants to learn general tuning.

REQUIRES

ATARI BASIC Language Cartridge
One ATARI Joystick Controller
Tuning hammer
Damping wedges or felt

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$29.95	APX-10216
Diskette	24K	\$29.95	APX-20216

Personal Development

FINGERSPELLING

by Dewey Garton

Recommended for ages 4 and up

Written in BASIC

This colorful program helps you learn to speak with your hands. Although communicating with deaf people is the principal use of fingerspelling, the technique is also useful for situations like working in a noisy environment. It can even be a fun way for kids to communicate with each other "in code." The program has two parts:

- Show me. You type a letter or a word up to ten letters long, and the program displays the hand images one at a time with the letter alongside for reinforcement.
- Test me. You practice reading by typing the letter or word that corresponds to the hand images you see on the screen. You can choose from three levels of difficulty and ten speeds.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX 10197
Diskette	24K	\$24.95	APX 20197

PERSONAL FITNESS PROGRAM

by David Getreu

Recommended for ages 12 and up

Written in BASIC

Have you been spending too many hours at your ATARI Home Computer? Are you developing hobbyist's spread? Do your muscles strain when you lug your equipment to the users' group meeting? Don't despair. Without leaving your computer, you can recapture the old vigor by exercising for 15-30 minutes a day.

The eight exercises in the PERSONAL FITNESS PROGRAM may help improve your flexibility, strength, stamina, coordination, circulation, and general body tone. The program tailors the exercises to you. It contains daily and weekly progress charts.

CONSULT YOUR PHYSICIAN BEFORE USING THIS EXERCISE PROGRAM

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

One set of ATARI Paddle Controllers
One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	24K	\$24.95	APX 20043

BLACKJACK TUTOR, Rev. 1.1

by W. H. Northrup

Recommended for adults

Written in BASIC and machine language

Here's a game with more than entertainment as its purpose. It's also a tutorial designed to increase your mastery of blackjack playing and betting strategy. First you learn basic blackjack strategy so that you can maintain roughly even odds over the dealer. Next you tackle the tens count strategy, which can give you as much as a ten percent advantage over the dealer during some portions of game play.

Designed for players already familiar with the casino card game, BLACKJACK TUTOR is based on the mathematical probabilities of blackjack. As the dealer, the computer follows casino rules. You have the options of staying, hitting, doubling, splitting, surrendering, and asking for insurance.

Rev. 1.1 fixes bugs in doubling and splitting aces.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX 10057
Diskette	24K	\$24.95	APX 20057

PLAYER PIANO

by Jerry White

Recommended for ages 4 and up

Written in BASIC

Turn your computer into a twenty-note minipiano! Everyone can enjoy this versatile program, regardless of music ability or training.

The program displays the twenty black and white piano keys, and a musical note symbol jumps across the keys as you play your tune. You create tunes much like tapping one out on a piano — you strike a key and the note plays. You can save your tune for recall at a later time. PLAYER PIANO lets you build tunes having as many as 400 notes, composed of whole, half, quarter, and eighth notes, and having a variety of tempos.

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	32K	\$24.95	APX 10062
Diskette	32K	\$24.95	APX 20062

Personal Development

KEYBOARD ORGAN

by Alan Griesemer and Stephen Bradshaw

Recommended for ages 6 and up

Written in QS FORTH

What does "Z Z B B N N B V V C C X X Z" mean to you? With **KEYBOARD ORGAN**, it's the beginning of "Twinkle, Twinkle Little Star"! You can turn your ATARI Home Computer into a simple organ with vibrato and attack features. You play songs using the computer's keyboard as if it were an organ keyboard, except that you can play only one note at a time. You can record and play back your songs, and even play duets or rounds by recording a song and playing it back while you play along on the computer keyboard.

REQUIRES

No required accessories

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	24K	\$24.95	APX-10094
Diskette	24K	\$24.95	APX-20094

VIDEO KALEIDOSCOPE

by Raymond Weir

Recommended for ages 4 and up

Written in BASIC and machine language

To introduce a young child to the colorful world of computer graphics, or to show off the graphics capabilities of your ATARI Home Computer, consider **VIDEO KALEIDOSCOPE**. It's so easy to use that even small children can enjoy creating elaborate, colorful, whirling pictures that go far beyond the simple image mirroring of traditional kaleidoscopes.

First you use a joystick to draw simple or complex designs. The design repeats in the four quadrants of the screen as you draw. Then you begin the kaleidoscope and press any key for a different special effect: rotating rainbows, color flashes and pulses, alternating patterns, graduated spectrums, a freeze-frame effect, and a continuation of design development. You can change colors at any time. A special design can be stored and recalled later.

REQUIRES

ATARI BASIC Language Cartridge
One ATARI Joystick Controller

OPTIONAL

Diskette(s) for storing designs

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$17.95	APX-20213

BANNER GENERATOR prints banner messages, with characters up to six inches high and up to eighty characters long. Options include different fills and intensities. **REQUIRES:** ATARI BASIC Language Cartridge, ATARI 825 printer or equivalent printer.

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$15.95	APX-10040
Diskette	16K	\$15.95	APX-20040

GOING TO THE DOGS helps you project the outcome at dog races, taking into account point rating, ranking, position, and track specifics. **REQUIRES:** ATARI BASIC Language Cartridge, DOS 2-formatted diskette(s) for storing data, a racetrack program.

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	24K	\$24.95	APX-20123

HYDRAULIC PROGRAM (HYSYS): Fourteen system calculations help you solve equations dealing with hydraulic pumps, motors, and cylinders. **REQUIRES:** ATARI BASIC Language Cartridge. **OPTIONAL:** ATARI 825 printer or equivalent printer.

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$22.95	APX-20066

ISOPLATH MAP-MAKING PACKAGE: Draw topographical contour maps with just altitude points, and the computer connects all points with the same value. **REQUIRES:** ATARI BASIC Language Cartridge. **OPTIONAL:** ATARI 825 printer or equivalent printer.

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$22.95	APX-20103

TEXT FORMATTER (FORMS): With **FORMS** and a cassette or diskette text editor, you can change line spacing and length, left margin, and indentation without re-keying text. **REQUIRES:** ATARI BASIC Language Cartridge, compatible text editor, ATARI 825 printer or equivalent printer.

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX-10002
Diskette	24K	\$24.95	APX-20002

Learning



EXCALIBUR

by Chris Crawford, Larry Summers,
and Valerie Atkinson

Recommended for ages 13 and up
Written in machine language

Use your wits and intuition to rule a kingdom.

In Camelot, young Arthur has begun his reign as king. After more than 20 years of petty, bloody wars fought by upstarts and pretenders, the united Britain his father once ruled has been splintered into shards. Now Arthur, the rightful monarch, has come to restore peace, order, and good government. Armed only with his magic sword Excalibur, guided only by his intuition and the spells of Merlin, he must weld these tiny warring kingdoms into a great nation.

How does a monarch learn to govern? Could you learn to rule a nation? EXCALIBUR offers you the chance. Its designers (who include Chris Crawford, creator of the bestselling EASTERN FRONT 1941) have built a world. To rule wisely, you must use economics, diplomacy, magic, military strategy, even the loyalties of friends and enemies, to reach your goals.

To heighten your sense of being in a "real" world, you make decisions based on judgment instead of set formulas of play. How you choose to rule shapes the structure of the game. To help you understand the rich and complex world of Arthur, the authors provide a brief manual that outlines the basics, and a full-length novel written especially for EXCALIBUR. This is a game for the dedicated player.

You use your joystick to move from the Round Table room, where loyalties ebb and flow, to the throne room, then to the Treasury, where taxes are set and armies are raised, to Merlin's lair. With his help, you can see into the locked treasuries and minds of allies and foes. Or you can leave the castle and travel across the map of Britain to do battle with your enemies in the hope of making them your vassals.

REVIEW COMMENTS

The game is engrossing, and requires thought and perception.

REQUIRES

One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	48K	\$29.95	APX-20235



Learning



ADVANCED FINGERSPELLING

by Duane Bolster

Recommended for ages 5 and up
Written in BASIC

Sharpen skills of communication in fingerspelling

ADVANCED FINGERSPELLING is an easy and fun way to improve your ability to communicate through fingerspelling. Not only is this useful in communicating with the deaf, but it also can be used by others. In any environment where noise can interrupt speech — from construction sites to sports like football and sailing — fingerspelling is a convenient way to convey information accurately.

This program leads you through different stages of learning the language, from displaying signals on request or automatically, to testing your proficiency. After you feel competent enough, you can move to word and sentence construction and comprehension. The computer keeps score of your efforts, and displays them with bar graphs. With the diskette version you can even add your own words and sentences to the data file, or modify ones that already exist.

The author invites written questions and comments.

REVIEW COMMENTS

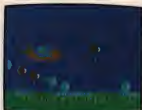
The disk storage and modification make this program more advanced than FINGERSPELLING. Good animation makes it user-friendly.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	32K	\$24.95	APX-10227
Diskette	32K	\$24.95	APX-20227



MUSICAL PILOT

by Charlie Kulas

Recommended for ages 3 and up
Written in machine language



Pilot a plane through the musical notes

Off you go, into the wild blue yonder, piloting your own plane through the musical notation of song after song. Each note is represented by a balloon, and you're trying to pop each balloon by flying through it. You have to use your joystick to aim your plane higher or lower so you don't miss the musical notes.

The program has four difficulty levels. On the higher levels, you have to move faster and rely more on the sounds, anticipating what notes are coming up and moving your plane up or down before you get to them. As you learn to do this, you're making progress in correlating the sounds of the song with the notes on the screen. And learning that relationship is what MUSICAL PILOT is all about!

The program keeps score for you, up to 1,000 points for completing the game and becoming an Ace.

The author invites questions and comments by mail and telephone.

REVIEW COMMENTS

The colorful screen, with balloons and a pilot in his plane, makes this a fun game for children to play, while they're learning the written representations of sounds and determining higher and lower pitch. Use of the joystick makes this game easy for children to play.

REQUIRES

One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX-10229
Diskette	32K	\$24.95	APX-20229



Learning



PUZZLER

by Paul Lewandowski

Recommended for ages 5 and up
Written in BASIC

Work jigsaw puzzles on the screen

If you've ever tried to amuse a child on a rainy afternoon, you know nothing works better than a jigsaw puzzle. With the PUZZLER program and your Atari Home Computer, you don't have to spread out the pieces on your dining room table, yet your child can work as many as 20 different brightly colored puzzles. Don't be surprised if teenagers and parents get involved in the game too!

The pictures are so charming and the puzzles are so absorbing, children will spend hours playing with them. At the same time, they're sharpening their skills of shape discrimination and pattern organization.

A child can choose to see the completed puzzle before beginning, or try to work it out from imagination. When he or she begins solving the puzzle, a grid appears on the screen with spaces for the puzzle pieces. The pieces are arranged randomly below the grid. Using the joystick, he or she selects a puzzle piece and directs it to the place in the grid where it belongs. There's no penalty for making a mistake, but when the picture is complete, the program displays the number of moves that were made.

The author invites comments and questions by mail and telephone.

REVIEW COMMENTS

This program offers a new dimension in puzzle solving. Small children may view the picture they're trying to create, and more advanced players can solve the puzzle without displaying the picture. Joystick use makes the program accessible to young children.

REQUIRES

ATARI BASIC Language Cartridge
One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$24.95	APX-20230



RINGMASTER*

by Gregor Novak

Recommended for ages 6 and up
Written in machine language

Monkeys, elephants, and camels teach the multiplication tables under the big top

Step right up to the circus! Watch the elephants and the camels on parade as the music plays. Everyone's in a carnival spirit — especially one rambunctious monkey. He's stealing the show by scampering all around the big tent. He hops onto the backs of the marching elephants or camels.

Using your Joystick Controller, you're the ringmaster — you guide him where he wants to go, and you make sure he jumps successfully. He'll make it if he always leaps onto the back of an elephant or camel numbered with a multiple of the number he started from at the bottom of the screen. He makes his way through four rows of animals marching to and fro, from the bottom of the screen to the top and back. He has to pay attention to the music so he's in a safe place when the tune ends. And he'd better not fall!

As you try higher levels of the game (up to the seventh), the speed of the parade increases, and the length of the tune decreases. The monkey has to hop more nimbly, so you have to think faster. At some of the levels, you can press a button for help, and the program displays the multiples of the number you're working on.

The author invites questions and comments by mail and telephone.

REVIEW COMMENTS

Elephants, camels, and circus music create an enjoyable atmosphere for learning and practicing the multiplication tables. The help option lets you study multiplication facts before playing.

*RINGMASTER is a Trademark of Sagesoftware

REQUIRES

One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX-10234
Diskette	16K	\$24.95	APX-20234

From the Editor

APX programs you might have missed

APX has two boards of review. One is made up of permanent members of the APX staff. The other is made up of you: our users. We're proud that many of the APX product review forms you send us are rave reviews. They're always a delight to read, and a little surprising — everyone has the time and energy to complain freely, but it takes a special effort to pay a compliment.

Your positive response often tells us that an APX program deserves special attention. This quarter, two programs have consistently won praise. The first, DATA MANAGEMENT SYSTEM, a home management program by Ronald and Lynn Marcuse (APX-20059), is ideally suited for files of short records such as catalogs of records, tapes, and books. If you're a collector with an out-of-control collection, this program is for you. Menus and prompts guide you through all data entry.

First you set up your file by entering file name, number of fields, field headings, maximum field value (up to 30 characters), and type of editing you'll need on each field. (You can select none, numeric, date, or dollar edits.) You can store records as large as 140 characters.

Once you've set up your file, you can add, update, or delete records. You can search your file on any field (author, for example), or use any of the valid search terms: less than or equal to; equal to; greater than or equal to; and range.

You can display your search results on screen or print them on your printer (up to 130 characters), and can specify either complete or partial records. Last but not least, you can use any field to sort your file, in either ascending or descending order.

This is one program on which all our reviewers agree: for a small data management system, the program is flexible, fast, easy to use, and it provides a large data base of entries. If you're not using your ATARI Home Computer to get yourself organized and free up your time, this program will provide a giant step in the right direction.

The second program, MAPMAKER by Stephen W. Hall (APX-20144), is a systems/telecommunications program of special interest to players of the hugely popular EASTERN FRONT 1941 and to designers of computer simulation games. Are you ready to take the leap up from player to designer? MAPMAKER is a great programming tool! You can use it to create multiscreen map displays that draw on the ATARI Computer's outstanding multicolor, fine-scrolled redefined character sets. The large display that can fit into a small amount of computer memory is wonderful. On systems with at least 40K of memory, 8K is available for displays of up

to 34 screens! On a 32K system, 4K is available for up to 17 screens.

MAPMAKER acts as an easel. You try out different shapes by displaying them on the screen. The fine scrolling feature allows smooth movement from one part of your map to another either by Joystick Controller or by keyboard directional keys. The program comes with a set of map elements, but you can create and use your own. (A compatible editor is INSTEDIT, available through APX.) When you complete a map, the program saves your file on diskette.

Chris Crawford, designer of EASTERN FRONT 1941 and one of the designers of EXCALIBUR, is a MAPMAKER user. And those who know MAPMAKER agree that it's easy to use. It may take some time to master, but your results will show it's time well spent. If you're thinking of creating a strategy game, or want to draw great maps, why re-invent the wheel? Save your time and energy for the more creative parts of the fun!

In future issues, as space allows, we'll be looking at other APX programs you've liked. Meanwhile, thanks for writing, and keep those cards and letters coming in!

DATA MANAGEMENT SYSTEM

by Ronald and Lynn Marcuse

REQUIRES

ATARI BASIC LANGUAGE CARTRIDGE

OPTIONAL

ATARI 825 80-Column Printer or Epson MX-80 Printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$24.95	APX-20059

MAPMAKER

by Stephen W. Hall

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

One ATARI Joystick Controller
INSTEDIT (APX-10060 or APX-20060) or other compatible character set editor

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$24.95	APX-20144

Learning



MONKEY UP A TREE

by Joe Grande

Recommended for ages 4 and up
Written in BASIC

Solve problems so the monkey can reach the bananas

It's lunch time in the jungle and a little monkey has found a tree with lots of ripe bananas. The only way the monkey can climb the tree to reach the bananas is for you to solve arithmetic problems. It's up to you to help the monkey get its lunch today.

Here's what you do: Each time an addition, subtraction, multiplication, or division problem appears below the tree, you type the answer. If you're right, the monkey can climb part way up the tree. If you miss an answer or take too much time, the monkey slides down a bit, and the right answer appears so you can study it. The monkey is very hungry today and wants three bananas for lunch, but he can grab just one on each trip up the tree. Only you can help make a hungry monkey happy (and win the game!).

MONKEY UP A TREE can be enjoyed by one or two players of all ages, because each correct answer entered by a player causes the difficulty level of that player's subsequent problems to change. The difficulty is determined by the speed and accuracy of previous answers and is adjusted continually. This handicapping feature means all family members should try their best rather than adult players "going easy" on children and it means the game grows with a child's growing math ability.

The author invites written questions and comments.

REVIEW COMMENTS

Reaching the bananas is an appealing goal for children. The sliding monkey is an effective motivator. Sharing the keyboard may be a bit awkward at first for two young children. Very small children should have an adult available for guidance.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX-10165
Diskette	24K	\$24.95	APX-20165



TYP0 ATTACK

by David Buehler



Recommended for ages 8 and up
Written in machine language

Type the right key and hit the Typos!

Do you remember the boring drills and practices you endured to increase your typing speed? Too bad TYP0 ATTACK wasn't around then. But it's not too late to enjoy this fast-paced game for practicing locating keys on the keyboard and for improving your touch-typing speed and skill. TYP0 ATTACK will appeal to beginning and professional typists alike (and will probably convert non-typists, as well).

Your goal is to defend eight bases against animated typo invaders falling directly overhead. Each base displays a key-board character. To destroy a typo, you type the character directly below it in a base, which sends up an energy bolt. Pressing several keys at the same time won't help, you must type only one character for the bolt to fire. After the first few invasion waves, you have no time to search for the character on the keyboard. You must rely on your touch skill. And to add to the challenge, the characters in the bases change randomly. The better you become at fending off the typos, the faster they fall and the greater the selection of keys displayed in the bases. If you wipe out one set of invaders, you automatically face another of the game's eight kinds of typo invaders. Each time a typo lands, it digs nearer to the base. When a typo finally reaches a character in a base, the game ends.

TYP0 ATTACK comes with nine skill levels. The higher levels contain more typos per invasion, more keys displayed in the character bases, and faster typo invaders. The program keeps track of the high score as well as your current score.

The author invites written comments and questions.

REVIEW COMMENTS

What a great way to practice touch typing! This game is hard to put down. The cute creatures, varied songs, and quick action all add up to an engrossing game.

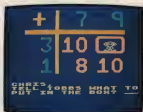
REQUIRES

No required accessories.

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	8K	\$29.95	APX-10180
Diskette	16K	\$29.95	APX-20180

Learning



TEASERS BY TOBBS

by Thomas C. O'Brien
and Sunburst Communications
Recommended for ages 8 and up
Written in BASIC

Tell Tobbs how to solve math problems in a puzzle grid

Hours of absorbing, challenging fun are in store when you meet Tobbs and try to solve his "teasers" — puzzles in the form of grids. The puzzle grids are made of three squares across and three squares down. The symbol for addition or multiplication appears in the upper left square, and the other eight work together like a crossword puzzle to show sums or products. At first some of the squares are blank. Tobbs hops about asking what number should fit into each square, based on the relationships among the numbers you can see. He shows his delight when you give him the right number, but he shakes his head firmly when you're wrong.

The program is based on the ideas of Jean Piaget, the father of child developmental psychology. At the easiest level, you supply one-digit answers. But at the higher levels, not only do the squares hold two-digit numbers, but you often have to reason backwards, forwards, and sideways from the sum to the numbers which add or multiply together. For very advanced players, some puzzles have more than one possible answer. If things get too hard for you, Tobbs is always available to give you help. He calculates how many problems you answered correctly at the end of each set of puzzles. Teachers can use the program in the classroom, but parents can also help their children improve their skills. Adults, too, will be challenged by these puzzles!

The author invites questions and comments by telephone.

REVIEW COMMENTS

This program goes far beyond mere computation to tap broad math skills, such as reversibility, a major factor in intellectual development.

The user manual provides educational theory as well as instructions.

REQUIRES

ATARI BASIC Language Cartridge

PAL

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	16K	\$29.95	APX-20201



CUBBYHOLES

by Dale Disharoon

Recommended for ages 5-12
Written in BASIC

An addition game for 1-2 players

If you're looking for a fresh approach to teaching addition, your search is over. Youngsters will line up to play CUBBYHOLES! This one- or two-player game gives plenty of addition practice, but players will be so absorbed in wielding their Joystick Controllers and planning their strategy, they'll hardly be aware they're sharpening their addition skills.

In the two-player version, you each work on separate but identical 3-by-3 grids of one-digit numbers. Below the grid a number between 6 and 18 is displayed. You can either select this number yourself or you can opt for CUBBYHOLES to choose it for you. You use a joystick to draw boxes around sets of numbers such that each set adds up to the number below the grid. You must use all the numbers in the grid, and you may enclose each number in only one box. Each grid has only one solution! Once you think you've solved the puzzle, move to the middle of the grid and press the joystick's trigger button. If you're wrong, CUBBYHOLES tells you to try again. If you're right, you score a point and another round begins. You can play as few as two rounds or as many as twenty. In the one-player version, one grid is displayed, and your goal is to complete every round successfully. CUBBYHOLES has more than five hundred puzzle combinations, so line up the kids for fun and competition with an educational twist.

The author invites questions and comments by mail and telephone.

REVIEW COMMENTS

CUBBYHOLES is a charming approach to teaching simple arithmetic. The graphics, sound, and ingenuity add a new dimension to drill and practice programs.

CUBBYHOLES is a teacher's dream for increasing students' concentration, analytical abilities, and math skills — all at the same time. It's a great two-player game, but it's rather weak as a one-player game.

REQUIRES

ATARI BASIC Language Cartridge
One ATARI Joystick Controller per player

PAL

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX-10101
Diskette	24K	\$24.95	APX-20101

Learning



COUNTER

by Al Casper

Recommended for ages 3-8

Written in BASIC and machine language

An introduction to numbers in four languages

Young children will happily learn to count to fifteen with this friendly introduction to numbers. Bright colors and happy sounds capture youngsters' attention and add to the fun of counting exercises in English, French, German, or Spanish.

COUNTER has two parts. First, a number of five-legged Gorks pop up on the screen. For each Gork, the Arabic numeral and the word for the number in the selected language scroll across the bottom of the screen and a chime counts the number of Gorks currently on the screen. In the second part, COUNTER displays a random number of objects, such as sailboats or barns, and waits for the child to count them. He or she can either use the space bar, Joystick Controller, or Paddle Controller to count each object, or press a number key to indicate the total number of objects. Each response changes the screen's background color, and after each correct answer, the screen turns green and a short melody plays. With one keystroke, parents can check on a child's progress.

All four versions of COUNTER have six levels of difficulty. As the levels increase, permitted response time decreases and the maximum number of objects displayed increases. COUNTER can also serve as an elementary vocabulary tutorial in any of the program's four languages.

The author invites written questions and comments.

REVIEW COMMENTS

COUNTER has all the color, sound, and action needed to captivate younger children. When ignored, the program slowly cycles through its repertoire, enticing a child to come play with it.

REQUIRES

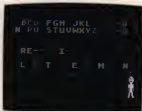
ATARI BASIC Language Cartridge

OPTIONAL

A set of ATARI Paddle Controllers
One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$29.95	APX-10148
Diskette	24K	\$29.95	APX-20148



LETTERMAN

by Ed Stewart and Ray Lyons

Recommended for ages 8 and up

Written in BASIC

A non-violent hangman for 1-2 players

Has it ever bothered you that a game as fun as hangman has a violent underlying premise? Well, here's a variation on the traditional paper-and-pencil, word-guessing game that replaces a dismal outcome with lively animation, colorful graphics, and amusing sound effects. The only object in danger is the apple on Letterman's head! You have six turns in which to guess the secret word, one letter at a time. Either the program or another player can choose the word. LETTERMAN contains nearly 400 words within three selectable difficulty levels. And when you've exhausted this list you can continue to enjoy LETTERMAN because the user manual contains easy-to-follow instructions for adding to (if you have more than 16K of computer memory) or revising LETTERMAN's list of words.

The cassette and the diskette versions differ slightly. Both versions work as described above. However, the diskette version offers some added features. You can request hints if you get stuck. You can also choose to play under a time limitation for making each guess. And the program can keep track of as many as nine players' turns and scores.

The authors invite comments by mail and telephone.

REVIEW COMMENTS

The graphics features and lively, friendly approach used in every aspect of LETTERMAN make this program especially appealing.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX-10096
Diskette	32K	\$24.95	APX-20096



Learning



MORSECODE MASTER

by James Bayless

Recommended for ages 8 and up

Written in BASIC

Learn and practice characters, words, and sentences in Morse code

If you're an aspiring amateur radio operator, you know you have to learn Morse code thoroughly before you can be licensed. That used to mean hours of drudgery with charts of dots and dashes. Somehow, no matter how long you practiced, the dots and dashes on the charts seemed completely different from the beep sounds you heard when Morse code was actually used. And learning characters one by one was no way to prepare for the complete sentences you'd have to decipher.

MORSECODE MASTER gives you a way to practice that's both realistic and fun. You begin by typing the character (letter, number, or punctuation mark) you want to learn. The program sounds the code for that character three times in long and short beeps. When you're ready to practice, you can listen to characters chosen randomly and try to identify them.

Then you can practice with words. The program signals whole words (from its repertoire of 400) and you type them in response. If you don't recognize them, you can ask for the answer.

Finally, you can practice with complete sentences as your proficiency grows. This is the most accurate simulation of what it's like to use Morse code. At any time, you can vary the speed and pitch of the drills.

The author invites written comments and questions

REVIEW COMMENTS

Features like complete sentences and changeable speed and tone make this the best teaching program of its kind.

The user manual features an appendix with a chart of Morse code signals.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	24K	\$29.95	APX-10211
Diskette	32K	\$29.95	APX-20211



MY SPELLING EASEL

by Al P. Casper

Recommended for ages 3-10

Written in BASIC and machine language

Paint landscapes in your computer by typing letters and spelling words

Have you ever seen an artist set up an easel at the beach? It doesn't take long before a crowd gathers. You can expect the same thing to happen when you set up MY SPELLING EASEL for children. The pictures they create are so captivating that everyone wants to get into the act.

Each time a word appears at the bottom of the screen, the child types one or more letters. The word might be "dog" or "hills." A picture representing the word appears, until the child has composed a whole fanciful landscape. And for fun, he can easily change the colors of his picture. Children can play this multilevel game with the keyboard or a Joystick Controller. In the "easy scene," the child can press any letter to add a picture to his landscape. The next level requires a key of a letter in the word. The third level calls for each letter of the word in any order, and the fourth calls for all the letters in order. If nobody's playing, the program automatically creates landscapes.

The author invites written questions and comments.

REVIEW COMMENTS

Al Casper, author of COUNTER, has come up with another unique educational challenge for kids. Beginning readers will love this program. Not only can a non-reader cause a picture to be displayed by touching any key, but newly successful readers can be challenged to type a whole word and display its picture on the TV screen.

The user manual gives simple instructions and includes a Quick Reference.

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$29.95	APX-10200
Diskette	24K	\$29.95	APX-20200

Learning



NUMBER BLAST

by Richard Wittala

Recommended for ages 6-16

Written in BASIC

A multiplication and addition game for 1-2 players

Who doesn't like color, sound, and action to perk up tedious memory drills? Here's a one- or two-player number drill combining quick thinking with quick reflexes. In the two-player version of NUMBER BLAST, you practice your multiplication and addition while working your joystick to "blast" to the correct number more quickly than your opponent. But be careful — incorrect answers cost you points. Depending on the kind of number drill chosen, either the first to score 200 points or the player with the higher score at the end of a set number of problems is the winner. In the one-player version, you can practice your joystick techniques and response speed while blasting your way through the drills. You can select a slow, medium, or fast joystick speed.

NUMBER BLAST offers practice in random addition problems with numbers ranging from 1 to 20, addition tables from 1 to 9 with one number picked at random; and integer addition problems with numbers ranging from -20 to 20. It also offers random multiplication problems with numbers ranging from 1 to 12, multiplication tables from 1 to 9 with one number picked at random; and integer multiplication problems with numbers ranging from -12 to 12.

The author invites written questions and comments.

REVIEW COMMENTS

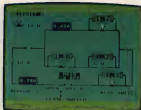
The joystick aspect of NUMBER BLAST, which is quickly mastered, makes this number drill fun for youngsters. The program also uses color and sound to enliven the drills.

REQUIRES

ATARI BASIC Language Cartridge
A set of ATARI Joystick Controllers

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$17.95	APX-10097
Diskette	24K	\$17.95	APX-20097



CIRCUIT LAB

by Mark Davids and Sheldon Leemon

Recommended for ages 14 and up

Written in BASIC

Build and test Direct Current electrical circuits

Here's an imaginative program that lets you build an electrical circuit on your TV screen. If you plan everything right, a light bulb snaps on to congratulate you! The program is invaluable in school electronics and physics labs, but it's also useful to anyone wanting to learn about electric circuits.

The program allows you to work with series, parallel, or combination series/parallel circuit layouts. You use a joystick to place switches, light bulbs, resistors, ammeters and voltmeters in the circuit. After building the circuit, you close the main switch and the circuit comes to life. The meters show voltages and currents, and the bulbs even light. You'll see how voltage, current, and resistance are related. If the light bulb doesn't light up, you can redraw the circuit, or replace the components.

If you're working on your own, and find that your circuit needs modifying, the manual gives you plenty of help. It explains design theory in some detail, including the appropriate laws of physics. Complete formulas and diagrams help you test your circuit, calculate the effect of the values, and show you how to do the calculations.

The authors invite written questions and comments.

REVIEW COMMENTS

Tested in high school physics and electronics classes, this program makes electronics simple to understand, and provides interesting insights into physics principles.

REQUIRES

ATARI BASIC Language Cartridge
One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$24.95	APX-20215



Learning



SPELLING GENIE, Rev. 2.0

by Dale Disharoon

Recommended for ages 5-14

Written in BASIC

Four one-player spelling games using preset lists or your own

SPELLING GENIE has so much magic and whimsy that children will want to play its four spelling games time and time again. Now with Revision 2.0, you have the option of saving your own word lists to a diskette or cassette. (There's also a slow game, Tip Off.) Teachers and parents will welcome the program's versatility. Along with nine predefined spelling lists, SPELLING GENIE accommodates any spelling list children need to practice.

SPELLING GENIE features four very different approaches to mastering spelling skills. In Pop On, a word flashes briefly and the child then types in the same word. In Mix Up, all the letters of a word appear in random order and the child types in the complete word. In Tip Off, a one-letter clue appears in its proper place, then disappears and is replaced by a letter in another position. SPELLING GENIE also has a tournament option for playing all four games consecutively. In each exercise, players can't go on to another word until typing the current one correctly, but the program helps out in various ways to avoid discouragement.

A child playing alone works against a countdown clock to spell as many words as possible correctly. Two players can compete against each other for the winning score. All games are playable using the computer keyboard, or a Joystick Controller, or a combination. Children can also print their spelling lists for further study.

REVIEW COMMENTS

The four different games offer good reinforcement of word recognition and spelling skills.

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

One ATARI Joystick Controller per player
ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX-10145
Diskette	24K	\$24.95	APX-20145



PRESIDENTS OF THE UNITED STATES

by Gary A. Dacus

Recommended for ages 10 and up

Written in BASIC

One-player quizzes on U.S. presidents

Which president can women thank for giving them the vote? If you can't name the man, then you need **PRESIDENTS OF THE UNITED STATES**. This one-player quiz has two levels. On the novice level, you select a name from four choices, on the advanced level, you type in a president's first and last name. Both levels give you clues. Study the clues carefully because you have only one chance per question. The program displays a running total of your correct answers as you play and your final total at the end of the 40 questions. The game remains a challenge because the clues change from game to game. Oh yes, in case you've forgotten, Warren Harding gave women the vote.

The author invites written questions and comments

REVIEW COMMENTS

This straightforward quiz program is mostly text, using graphics only for the initial display screen. The programming routines used in the fill-in part let you use various forms of a president's name.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	24K	\$17.95	APX-10068
Diskette	32K	\$17.95	APX-20068





The Best Damn Computer Game Magazine.

Softline doesn't fool around. We won't waste your time by trying to explain spreadsheet programs, databases, word processing programs, or such esoteric fare as elephant herd management software.

We're akin to the Kentucky Colonel. We stick to what we know best—fried chicken and computer games.

Softline is a bimonthly, hands-on magazine packed with all the good stuff you Atarians need to keep up with the fast-paced world of computer games. *Softline* has reviews, news about the latest releases, tutorials on creating game graphics and sounds on the Atari.

Each issue of *Softline* has tips on how to play the latest and the greatest games. We have loads of contests and regularly give away games, cash, and other surprises. We illuminate the gaming industry and poke fun at just about everybody.

And each issue we compile the fiercely competitive High Scores section. Proud of your best score on *Zaxxon*? Send it in to High Scores and you may get your name in the magazine. Forget about being the champion of your local gaming enclave—you could be the champion of the Western Hemisphere!

Go for it! *Softline* costs a mere \$12 a year and is a must for anyone seriously into computer games.

Okay, we really know zip about fried chicken. But we do have the best damn computer game magazine in Kentucky or anywhere else.

SOFTLINE

Box 60
North Hollywood, CA 91603

ATARI® is a Registered Trademark of Atari, Inc.

Learning

PROGRAMS BY THE MINNESOTA EDUCATIONAL COMPUTING CONSORTIUM

The Minnesota Educational Computing Consortium (MECC) assists users and educational member systems in coordinating and using computer resources through cooperative planning. All MECC programs come with documentation prepared by MECC, including materials for background and follow-up activities.

These programs are not currently compatible with the ATARI 1200XL Home Computer.

The following requirements and order information apply to each MECC program available through APX.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	16K	\$29.95	see below

METRIC AND PROBLEM SOLVING (APX-20138)

Minnesota Educational Computing Consortium

Recommended for grades 2-6

Written in BASIC

Use these seven programs to practice the metric system and develop problem solving techniques:

- METRIC ESTIMATE — estimate line segments in centimeters and millimeters.
- METRIC LENGTH — convert from one metric unit to another.
- METRIC 21 — play a game of metric blackjack with the computer.
- BAGELS — use clues logically to guess a randomly-selected two- to four-digit number.
- HURKLE — play a game to learn to locate points on a number line or learn the coordinate system.
- NUMBER — guess a number from logical clues.
- TAXMAN — play a game to learn factors and prime numbers.

THE MARKET PLACE (APX-20162)

Minnesota Educational Computing Consortium

Recommended for grades 3-8

Written in BASIC

THE MARKET PLACE contains four simulations for teaching basic economic concepts: finding the optimal price based on sales, setting production levels, advertising budget, and setting price to maximize income. The programs even display financial reports.

- SELL APPLES — find the best price based on the number of apples sold (it's different each time).
- SELL PLANTS — set a selling price, with certain fixed costs. Then vary the advertising for five days to learn the best price and the best use of advertising.
- SELL LEMONADE — up to six lemonade stand owners vary their production and advertising costs for 15 days to maximize profits.
- SELL BICYCLES — learn how pricing, advertising, and production levels affect supply and demand by managing two bicycle companies.

GEOGRAPHY (APX-20164)

Minnesota Educational Computing Consortium

Recommended for grades 4-10

Written in BASIC

The GEOGRAPHY diskette contains four programs for practicing identifying names and locations of cities, states, countries, and continents. Students select a geographical area, and the program displays problems to answer. The programs are: STATES, CAPITALS, CONTINENTS, and COUNTRIES.

EARTH SCIENCE (APX-20160)

Minnesota Educational Computing Consortium

Recommended for grades 5-12

Written in BASIC

The EARTH SCIENCE diskette contains five programs:

- EARTHQUAKES — locating epicenters, and solving problems on primary and secondary waves, and lag time.
- MINERALS — identifying 29 minerals.
- SOLAR DISTANCE — understanding distance in space by imaginary travel in different vehicles.
- URSA LESSON — studying star patterns in five northern hemisphere constellations.
- URSA ROTATION — simulating patterns of rotation of constellations on any day of the year.

OPTIONAL

One ATARI Joystick Controller

ELEMENTARY BIOLOGY (APX-20136)

Minnesota Educational Computing Consortium

Recommended for upper elementary-
junior high school levels

Written in BASIC

The ELEMENTARY BIOLOGY diskette contains three programs:

- CIRCULATION examines circulation in a fish with a two-chambered heart. Color graphics show a blood cell moving throughout the circulatory system.
- ODELL LAKE focuses on ecological concepts in a lake. Students role play a fish trying to survive encounters with other fish and organisms.
- ODELL WOODS teaches ecological concepts, using the example of a North American animal who makes the decisions necessary to survive.

PREFIXES (APX-20163)

Minnesota Educational Computing Consortium

Recommended for grades 3-6

Written in BASIC

PREFIXES contains seven programs highlighting the common prefixes "un", "re", "dis", "pre", and "in". The first part of each lesson defines the concept of a prefix and the definition of the prefix being studied, with examples and graphics to clarify the meaning. The second part is an exercise to reinforce the concepts just presented (for example, completing sentences with the appropriate word plus prefix). Two games encourage students to review the material. Since the program selects questions randomly, students can repeat practices without repeating the same sequence of problems.

Learning

INSTRUCTIONAL COMPUTING DEMONSTRATION (APX-20137)

Minnesota Educational Computing Consortium

Recommended for teachers

Written in BASIC

The INSTRUCTIONAL COMPUTING DEMONSTRATION highlights some techniques used in MECC programs, such as drill and practice, simulation, educational games, problem solving and demonstration tools. The six programs feature skills used in different school subjects. RHYTHM is a music drill, BASE TEN reinforces multiplication skills, EARTHQUAKES is a science simulation, SLOPE demonstrates the concepts of slope and intercept, and LEMONADE is a social studies decision-making simulation.

OPTIONAL

One ATARI Joystick Controller

MUSIC I — TERMS AND NOTATIONS (APX-20139)

Minnesota Educational Computing Consortium

Recommended for grades 5-10

Written in BASIC

This set of programs is the first of three diskettes focusing on music theory drill and practice. Students choose the level of difficulty that's appropriate for them. The program keeps track of the problems answered correctly and selects subsequent problems from ones the student hasn't tried or has answered incorrectly. The programs are NOTE TYPES, NAME THE NOTE, KEY SIGNATURES, TERMS, and ENHARMONICS.

MUSIC II — RHYTHM & PITCH (APX-20172)

Minnesota Educational Computing Consortium

Recommended for grades 5-10

Written in BASIC

This is the second in a series of diskettes for music theory drill and practice. It contains the following programs:

- COUNTING drills time signatures, note and rest type, and counting
- AURAL INTERVALS and VISUAL INTERVALS gives practice in recognizing intervals by ear and sight.
- WRONG NOTE compares written and performed pitch patterns.
- MISSING NOTE provides drill in elementary melodic dictation
- RHYTHM teaches comparison of written and performed rhythm patterns
- RHYTHM PLAY trains in performing rhythm patterns.

Please note, MECC programs are usable only with those ATARI 810 Disk Drives having a data separator circuit. Drives with a blue "DS" sticker on the disk drive carton have this circuit.

MUSIC III — SCALES & CHORDS (APX-20161)

Minnesota Educational Computing Consortium

Recommended for grades 3-10

Written in BASIC

This is the third diskette in a series for music theory drill and practice. The programs provide aural practice in recognizing musical tones.

- WHOLE-HALF — the computer plays a series of pitches, and the student determines the whole steps and half steps.
- FIND THE HALF — the computer plays a series of pitches, and the student selects between which two pitches a half-step interval occurred
- TRIADS — identify arpeggiated major, minor, augmented, and diminished triads
- SCALES — identify major scales, three minor scales, and four modes
- SEVENTHS — identify major, minor, dominant, half diminished, and full diminished seventh chords

ATLAS OF CANADA quizzes you on the provinces, capitals, and landmarks of Canada, using an outline map on the screen. REQUIRES ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX-10093
Diskette	32K	\$24.95	APX-20093

TEXT ANALYST, Rev. 2, analyzes the reading level of a text file based on the Dale-Chall Readability Formula. Rev. 2 lets you analyze several files in sequence and specify the size of the sample. REQUIRES ATARI BASIC Language Cartridge.

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$17.95	APX-20142

FROGMASTER is a fast-moving competitive game for one to four players that teaches the use of conditioning to train animals. The computer simulates a primitive brain. REQUIRES ATARI BASIC Language Cartridge. One ATARI Joystick Controller per player.

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	24K	\$24.95	APX-20131

HICKORY DICKORY teaches children to tell time by a traditional clock, and to convert the information to digital time. REQUIRES ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$17.95	APX-10071
Diskette	24K	\$17.95	APX-20071

The quarterly APX contest

All programs accepted by APX by the deadlines listed below automatically become contestants in that quarter's judging. First, second, and third prize winners in each of four categories receive ATARI hardware and software products (including APX products) as prizes. The *Consumer* category has larger prize values, reflecting our commitment to the home computer user. The categories (we've revised some of these titles for clarity and brevity) and their prize values are*:

1 Consumer (Entertainment and Personal Development)

- 1st prize \$3,000
2nd prize \$2,000
3rd prize \$1,000

2 Home Management

3 Learning

4 Systems/Telecommunications

- 1st prize \$2,000
2nd prize \$1,500
3rd prize \$ 750

Programs accepted by APX on or before October 1, 1983 will be eligible for the 1983 grand prize — \$25,000 in cash!

To request an APX Program Submission Packet, containing complete instructions for submitting programs, write or call APX.

*Based on manufacturer's suggested retail prices.

Contest rules

1. Only programs accepted by APX are eligible for the contest.
2. A program is eligible for the prizes in the category in which it is accepted. Atari determines this category.
3. A program is eligible for the quarterly prizes awarded in the quarter in which it is first accepted and for the grand prize of the contest year in which the quarter falls.

4. A program qualifies only once for a quarterly prize and once for a grand prize. Revisions and improvements do not qualify a program for another prize in this contest.

5. A program is judged on a variety of factors by a panel of judges selected by Atari. The judges consider a program's

- User interface and overall design
- Originality
- Ease of use
- Implementation
- Documentation
- Interest level

6. Atari employees and their families are not eligible for the contest.

7. Atari pays for shipping prizes anywhere within the United States. Foreign winners are responsible for any additional shipping charges.

8. The decisions of the judges are final.

9. This contest is void where prohibited by law.

1984 closing dates

The dates by which a program must be accepted for a contest judging are as follows:

Date	Contest
January 3	Spring contest
April 1	Summer contest
July 1	Fall contest
October 3	Winter contest
	and 1984 grand prize

APX: Programs by our users...for our users

Two years ago, Atari, Inc., created the ATARI Program Exchange to manufacture, distribute, and promote programs written by consumers for ATARI Home Computers.

Since then, APX (pronounced "apex") has grown by leaps and bounds. Today we offer a wide range of useful and imaginative programs tailored to your needs and interests. And that's what makes APX programs so popular: they were designed by people like you with your needs in mind.

Hundreds of programs arrive at APX each quarter in the hope of being picked for distribution by APX. To encourage users to send us submissions, and to help keep our quality high, new products compete for prizes in our quarterly contest, and an annual grand prize of \$25,000 in cash is awarded to the program judged best of the year. Any program accepted by APX, prizewinner or not, brings its author royalty payments based on sales.

Each program submitted undergoes a multilevel review. First it must pass a set of checkpoints. We check for such things as completion of all necessary paperwork, correct copyright notice display, verification of specified minimum computer memory, and so on.

Next we consider how well a program's content relates to its APX category. For example, in educational programs, all answers entered by the user must result in a meaningful and appropriate response from the program: positive responses must be clearly positive; negative responses must be clear but not discouraging. As part of the content check, we test all transfer of files to and from data bases. This means the author must provide sample data files with the program.

When a program passes both these initial checks, it goes before the APX Review Board. When the board gives a program its okay, it qualifies for acceptance in the next edition of the APX Catalog. If the program shows promise but is not yet up to the APX standard, the author receives a detailed letter outlining changes that could be made to improve the program. If the author makes these improvements, the board can re-evaluate the program. Programs that do not pass the board's review receive a standard rejection letter.

If you are interested in submitting your program to APX, use the form in this catalog to request an APX Program Submission Package, which includes information for both domestic and international authors. Or you can call the APX toll free numbers: 800/538-1862 (outside California, but in the continental U.S.) or 800/672-1850 (within California). Or write to us at P.O. Box 3705, Santa Clara, CA 95055.

We look forward to hearing from you!

Order Form

Please read all the ordering information
before filling out this form

APX

**ATARI®
Program
Exchange**

Name _____

Address _____

City _____

State/Country _____ Zip Code _____

Phone () _____

Please indicate the amount
of RAM you have

_____ K

(alternate shipment method if UPS does not deliver in your area)

Qty	Order Number						Description	Price Each	Total Each
	APX								
	APX								
	APX								
	APX								
	APX								
	APX								
	APX								
	APX								
	APX								
	APX								
	APX	9	0	0	0	9	APX Product Catalog, fall 1983 edition	\$2.00	

ATARI PROGRAM EXCHANGE
P.O. BOX 3705
SANTA CLARA, CA 95055



**Send all orders
to this address**

**Toll-free numbers for
credit card orders**

Within California 800/672-1850
Elsewhere in Continental U.S.A.
800/538-1862

Or call direct at 408/727-5603

Subtotal of all items ordered	
California residents add 6.5% sales tax	
Shipping & handling charge	\$2.50
TOTAL	

Payment —

☐ Check/Money Order

☐ VISA

☐ MasterCard

Interbank No: _____

Credit card account no. _____

Credit card expiration date _____

Signature (as appears on card) _____

Minimum order

**\$10.00, plus
shipping and
handling**

Program Submission Packet Request Form

Fill out this request form to obtain complete information on submitting programs to APX.



Name _____

Address _____

City _____

State/Country _____

Zip Code _____

Phone () _____

Computer background:

- _____ None
- _____ Computer user/hobbyist
 - _____ Have not used ATARI Computers
 - _____ ATARI Computer user
- _____ Professional microcomputer software developer (have ads in trade journals and/or existing products)
 - _____ Have not used ATARI Computers
 - _____ ATARI Computer user
- _____ Other (please specify):

Area(s) of interest for writing software for ATARI
Computers:

Learning

EASYGRADER, REV. 1.1

by Dan Hale of A. D. Enterprises

Recommended for teachers & school administrators
Written in BASIC

EASYGRADER helps reduce the effort needed to organize and produce class records. You can store student grades, compute averages, assign final grades, produce statistics, and print reports with this comprehensive package.

You indicate class size, number of assignments, lengths of student and assignment names, and specify your own grading standards (either curve or standard percentage grading). Add or delete student records, or skip students excused from an assignment. Then print final grade reports, class average statistics, and a frequency plot of final grades. Rev. 1.1 has more color and a new menu. Design changes make it easier to use.

REQUIRES

ATARI BASIC Language Cartridge
DOS 2 formatted diskette(s) for storing data

OPTIONAL

ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$24.95	APX-20152

FLAGS OF EUROPE

by Gary A. Dacus

Recommended for ages 8 and up
Written in BASIC and machine language

FLAGS OF EUROPE is a colorful program that can help you quickly become an expert at recognizing European flags. Select from two kinds of quizzes for identifying each illustrated flag: multiple choice quizzes and the more challenging fill-in-the-blank quizzes. The program helps out with clues in response to incorrect answers, then waits for another guess. Correct answers are rewarded with a few bars of the country's national anthem or a native song.

FLAGS OF EUROPE remains a challenge after repeated use, since the order in which the flags appear varies from one session to the next, as does the selection of responses in the multiple choice quizzes. See how long it takes you to become a European flag wizard!

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$24.95	APX-20149

WORDMAKER

by Dale Disharoon

Recommended for ages 6 and up
Written in BASIC

WORDMAKER is a competitive game for people of all ages who enjoy words and reading. It's an effective practice tool for students. The more you play, the better you get.

One or two players use Joystick Controllers to make three- or four-letter words. In a two-player game, you race against time to fill your side of the screen with more words than your opponent. At the end of the game, the winner's name appears. Now you can either reuse all the words in the next game, or delete those words. (If you delete them, the game gets harder because you must think of different words.) In a one-player game, you try to surpass your own best score.

WORDMAKER's printout option lets you study your words after the game.

REQUIRES

ATARI BASIC Language Cartridge
One or two ATARI Joystick Controllers

OPTIONAL

ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	32K	\$24.95	APX-10099
Diskette	40K	\$24.95	APX-20099

WORD SEARCH GENERATOR

by Max Mulliner

Recommended for ages 6 and up
Written in BASIC

Teachers, students, and word lovers will all enjoy this combination teacher's aid and game. Use WORD SEARCH GENERATOR's two sample word lists, or create your own to tailor a one- or two-player game to a specific list of up to 30 words. Your objective is to locate words hidden in a grid of letters. The program has a wide array of options: you can change the word list, the size of the grid, and the time limit. You can print the grids and solution keys for them.

REQUIRES

ATARI BASIC Language Cartridge
One Joystick Controller per player

OPTIONAL

ATARI 825 80-Column Printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	24K	\$24.95	APX-20140

Learning

I'M DIFFERENT!

by Kathleen and Philip Bergh

Recommended for ages 3-7

Written in PILOT and machine language



THE MIDAS TOUCH

by Duane Bolster

Recommended for ages 8 and up

Written in BASIC

I'M DIFFERENT! is our first ATARI PILOT program. Designed by an experienced teacher and a professional programmer, it's one preschoolers are sure to enjoy. The program introduces the concepts of "same" and "different" in an entertaining, noncompetitive game that doesn't keep score and has no time limit. With the Joystick Controller (in right-handed or left-handed position), a child guides an invisible turtle to the general area of the graphic design that differs from three others displayed on the screen. The turtle leaves a trail wherever he goes. Correct responses cause flashing colors and a merry tune.

Five graphics choices range from differences in color or shape only, to classifying objects. I'M DIFFERENT! can help children learn hand-eye coordination, observation, classification, concentration, and other essential readiness skills.

REQUIRES

ATARI PILOT Language Cartridge (CX4018)

One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$24.95	APX-20183

THE MAGIC MELODY BOX

by W. Wes Horlacher

Recommended for ages 3 and up

Written in BASIC

THE MAGIC MELODY BOX is a fast, easy, and fun way to introduce young and old to music composition. Use a Joystick Controller to select one of twelve rhythm patterns, and then draw a melody line in the magic box. As you draw, the notes play, and you can back up and redraw your melody at any time. Then the program uses your melody line and rhythm selection to compose about a minute of harmonized music in a popular song format.

This music program doesn't use traditional musical notations, such as measures, notes, and clefs. Instead, it relies on simpler abstract concepts like graphics, balance, and themes. It doesn't teach how to read or play music; rather it teaches how to create music.

REQUIRES

ATARI BASIC Language Cartridge

One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$17.95	APX-10182
Diskette	24K	\$17.95	APX-20182

THE MIDAS TOUCH won't turn everything to gold, but this competitive word game provides hours of fun and *thinking*.

You can select a game for as many as four players, and you can choose between two difficulty levels. Your objective is to fill in the blanks on the screen to guess a phrase. You take your chances by spinning a roulette wheel, but you also have to think fast to come up with letters in a time limit. You win dollar values for your answers by turning the letter into a mineral (gold, silver, oil, or rock). At the end, the winner keeps his winnings, while everyone else's score turns to zero.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	32K	\$17.95	APX-10115
Diskette	32K	\$17.95	APX-20115

MUSICAL COMPUTER-THE MUSIC TUTOR

by Computer Applications Tomorrow

Recommended for ages 6 and up

Written in BASIC

MUSICAL COMPUTER—THE MUSIC TUTOR appeals to the untapped musician in all of us. Good graphics, a catchy tune, and simple explanations make this program an excellent educational tool for all ages — even young children.

MUSICAL COMPUTER gives you an overview of the mechanics of music. You quickly learn about musical symbols, treble and bass clefs, rhythm, and sharps and flats. You also learn the names of every musical note through simple phrases (such as "FACE" for some of the notes in the treble clef). You see how musicians read music by counting notes — whole, half, quarter, and eighth — and the rests in between. You even have time built-in to practice, practice, practice!

REQUIRES

ATARI Basic Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$17.95	APX-20098



Learning



ALGICALC*

by The Soft Warehouse

Recommended for ages 14 and up
Written in BASIC

ALGICALC gives you a quick way to perform operations in symbolic algebra and calculus. It's easy to use, and it has help screens you can display while using the program. To perform an operation, you type an expression, and the program then expands it, factors it, or differentiates it, as you request. After the result is displayed, you can enter another expression. In addition, you can assign the results to variables for use in later expressions, letting you perform a sequence of related operations.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	24K	\$24.95	APX-10126
Diskette	32K	\$24.95	APX-20126

*ALGICALC is a trademark of The Soft Warehouse

POLYCALC*

by The Soft Warehouse

Recommended for ages 14 and up
Written in BASIC

POLYCALC is a computational tool for performing symbolic algebra and calculus operations. It differs from ALGICALC in that it supports polynomials that are generalized to permit fractional and negative powers of variables, and the program can use many unassigned variables, whereas ALGICALC can use only one. However, POLYCALC is essentially a polynomial system rather than a rational expression system. The program is invaluable to professionals as well as students and teachers of algebra and calculus.

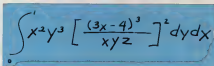
REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	24K	\$24.95	APX-10127
Diskette	32K	\$24.95	APX-20127

*POLYCALC is a trademark of The Soft Warehouse



CALCULUS DEMON*

by The Soft Warehouse

Recommended for ages 16 and up
Written in BASIC



CALCULUS DEMON (third in the series that includes ALGICALC and POLYCALC) provides a comprehensive tool for automatically deriving symbolic partial derivatives and indefinite integrals of expressions. It's best at calculus, although it contains some algebraic capabilities. It also offers some trigonometric, logarithmic, and exponential simplification. In contrast, ALGICALC and POLYCALC are better at algebra.

The program provides automatic and optional mathematical transformations to simplify results or aid integration. Unlike most programming languages, which can evaluate an expression only if all variables have numeric values, CALCULUS DEMON can do true non-numeric operations.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	32K	\$24.95	APX-10155
Diskette	40K	\$24.95	APX-20155

*CALCULUS DEMON is a trademark of The Soft Warehouse.

THREE R MATH CLASSROOM KIT

by Dan Rohr

Recommended for educators (for grades K-8)
Written in BASIC

THREE R MATH CLASSROOM KIT is a comprehensive package of three programs:

- A system students can use to drill on addition, subtraction, multiplication, and division problems on 101 difficulty levels.
- A worksheet printing program for practice drills (with or without answers).
- A gradebook record-keeping program for individual students and whole classes.

If you've looked at programs like this one, you're probably surprised at the low price for all the features available. But the decimal point is in the right place!

REQUIRES

ATARI BASIC Language Cartridge

ATARI 825 80-column Printer or Epson MX-80 Printer
Diskettes for storing records

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$49.95	APX-20205

Learning



THREE R MATH HOME SYSTEM

by Dan Rohr

Recommended for ages 5-13

Written in BASIC

Bring the widely acclaimed Three R Math System into the home

Parents whose children are using THREE R MATH CLASS-ROOM KIT in school tell us they're impressed. The program gives their children work on the precise level they need, it analyzes their progress in detail, it holds their interest with its novel approach, and it encourages them to keep trying. Because of its success in the classroom, an easy-to-use, one-disk version, which omits the grade book feature, was created for home use.

It offers all the same lively (but educationally sound) drills and analyses of the classroom system for the home. Not only does the program give children as much time as they want to practice, but it is also an ideal way for parents and children to work cooperatively.

Parents select one of 101-skill levels of addition, subtraction, multiplication, and division, and incorporate it into a five-letter password specifying the speed, number of problems per assignment, and total time allowed. The child has only to type his name and the password, and the drills begin. The program congratulates and encourages him as he works, and then summarizes his results. It's easy to print a complete analysis of his progress along with extra problems. Worksheets can be printed on any of the 101 levels to supplement the drills on the screen. Answer keys are also available.

The author invites questions and comments by mail and telephone.

REVIEW COMMENTS

The user manual includes a complete guide to the 101 difficulty levels. It also suggests ways parents can help their children use the program most effectively.

REQUIRES

ATARI BASIC Language Cartridge

OPTIONAL

ATARI 825 80-Column Printer or Epson MX-80 Printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	40K	\$24.95	APX-20208

VIDEO MATH FLASH CARDS drills math problems in the familiar flash card format. Work to increase speed and earn rankings like Math Wiz! **REQUIRES:** ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$17.95	APX-10048
Diskette	24K	\$17.95	APX-20048

ESCAPE TO EQUATUS: Help the desperate Mathmen escape from a hostile planet and return to the safety of their robot ship — only your arithmetic skills can save them! **REQUIRES:** ATARI BASIC Language Cartridge, One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	24K	\$24.95	APX-10190
Diskette	24K	\$24.95	APX-20190

MATH MISSION teaches computational skills in an exciting space game. Refuel a spaceship rocketing across the screen by supplying correct answers to math problems. **REQUIRES:** ATARI BASIC Language Cartridge. **OPTIONAL:** One ATARI Joystick Controller

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$24.95	APX-10193
Diskette	24K	\$24.95	APX-20193

MATH*UFO: Can an exciting arcade game improve your arithmetic? Position your guns beside the correct answers to math drills, and then fire at the invading UFO's. **REQUIRES:** ATARI BASIC Language Cartridge, One ATARI Joystick Controller per player.

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	24K	\$24.95	APX-10151
Diskette	32K	\$24.95	APX-20151

MATHEMATIC-TAC-TOE: Sharpen your computation skills! Choose from 15 difficulty levels, set a time limit, then place an X or an O in the boxes with correct problem answers. **REQUIRES:** ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	16K	\$17.95	APX-10082
Diskette	24K	\$17.95	APX-20082

Systems/Telecommunications

T: A TEXT DISPLAY DEVICE

by Joseph J. Wrobel

Recommended for BASIC programmers
Written in machine language

Intermix text and graphics on the same line in any graphics mode

Remember your frustration when you tried to put all that text on the screen and found 40 characters cramping your style? What about the less-than-satisfactory results when you tried to label some graphs? T makes intermixing text and graphics on the same line. You'll have more freedom and control over what you can put on a line with this autoloading, 510-byte routine than you have using the standard technique of doing display list modifications.

REQUIRES

ATARI BASIC Language Cartridge

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	8K	\$24.95	APX-10067
Diskette	16K	\$24.95	APX-20067

CHAMELEON CRT TERMINAL EMULATOR

by John Howard Palevich

Recommended for ages 14 and up
Written in BASIC and machine language

Convert your ATARI Computer into a computer terminal! For three terminal types, "Glass TTY," ADM-3A, and VT-52, CHAMELEON supports tabs, line feed, form feed, and a visual bell signal. For the ADM-3A and VT-52, it also supports cursor addressing and basic editing features. It doesn't support the special graphics character set of the VT-52 or some rarely used ADM-3A features.

CHAMELEON's many features include: an 80-column, 24-line character display (displaying 40 columns at a time); continuous transmission at baud rates of 75 to 4800 (non-continuous at 9600); full ASCII standard character set; uploading and downloading capability between your computer and a time-sharing system and between two ATARI computers; and the ability to dump the contents of the TV screen to a printer. Assembly language programmers with a 32K disk system and the Assembler Editor Cartridge can define new terminal types with CHAMELEON.

REQUIRES

ATARI BASIC Language Cartridge
ATARI 830 Acoustic Modem or an RS-232C device
ATARI 850 Interface Module

OPTIONAL

ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Cassette	24K	\$24.95	APX-10058
Diskette	32K	\$24.95	APX-20058

ATARI PROGRAM-TEXT EDITOR*

Recommended for teenagers — adults
Written in machine language

An editor for programs and text files

This is an exceptionally well-designed, easy-to-use text editor. It's superb for revising source programs written in various programming languages (for example, ATARI BASIC, ATARI Pascal, or assembly language). An outstanding feature is its two-mode approach of immediate text editing, along with commands for searching the file and for manipulating both text strings and blocks of text. You edit your text by moving a cursor around the 20 lines of text in the text window and then typing in your revisions. The cursor indicates your current position and where the next character will appear. (The cursor also lets you do automatic vertical scrolling forward and backward.) You can position the cursor and revise text in a wide variety of ways.

An auto-indent feature allows repositioning the cursor to an automatic tab stop on the next logical line, useful when writing code in languages like Pascal.

The command window at the bottom of the display screen contains three lines in which you can retain a series of commands and use them repeatedly, as needed. Command mode offers many actions.

The editor supports files too large to fit into computer memory with commands to load in sections of the file. You also use command mode to search for specific strings. The editor accepts wild cards as substitutes for characters in search strings.

Other commands let you insert and delete text strings. You can delete blocks of characters within a line, or you can delete the entire logical line. You can recover a deleted line with another command.

The editor also supports work with blocks of text. After you place markers immediately before and after the relevant text, you can use commands to copy, move, delete, print, or write to a diskette file.

You can also load in a designated diskette file and insert it before the cursor.

Another outstanding feature is the ability to customize the editor to fit categories of files. When you specify a filename with a certain extender, the editor automatically uses the options you set instead of its normal settings. Options include set tab, tab type, and tab display; set return display; set line length; set screen margins; and set screen color.

REQUIRES

ATARI BASIC Language Cartridge
(for customize feature only)

OPTIONAL

ATARI printer or equivalent printer

ORDER INFORMATION

Media	RAM	Price	Order No.
Diskette	32K	\$39.95	APX-20075

*ATARI PROGRAM-TEXT EDITOR is a trademark of Atari, Inc.

Publications

De Re ATARI

by Amy Chen, Jim Cox, Chris Crawford, Jim Dunion,
Bob Fraser, Kathleen Pitta, and Lane Winner

Handbook for advanced programmers

\$19.95 (APX-90008)

De Re ATARI (All About ATARI) tells you everything you want to know about the ATARI 400 and ATARI 800 Home Computers, but were afraid to ask. It's an excellent resource and training text for professional programmers who use ATARI Home Computers and for advanced hobbyists who understand ATARI BASIC and assembly language. Neither an introductory manual nor a reference for the computer, *De Re ATARI* explains the concepts behind the internal structure of the ATARI Home Computer.

Topics include graphics indirection (i.e., color registers and character sets), player-missile graphics, display list interrupts, scrolling, sound, the Operating System, the Disk Operating System, and ATARI BASIC. Many discussions concern the three special-purpose integrated circuits designed by ATARI — ANTIC (a microprocessor for television display), CTIA (a chip for television display), and POKEY (a chip for input/output and sound generation). Extensive appendices, sample programs, display screens, and diagrams generously illustrate the discussions. A glossary defines and explains some less commonly encountered terms.

An added feature is a laminated Programmer's Card containing the most needed facts and figures about the computer.

APX Product Catalog winter 1982-83 edition

\$2.00 (APX-90009 Rev. A)

This 88-page, four-color catalog contains sample screens and descriptions for 159 programs. This is the base issue for 1983.

spring 1983 edition

*1/2/3/4/5/6/7/8/9/0009 Rev. B

This issue contains sample screens, full descriptions, and review comments for programs new to the spring edition, and condensed descriptions for all other APX programs.

summer 1983 edition

\$1.00 (APX-90009 Rev. C)

This issue contains sample screens, full descriptions, and review comments for programs new to the summer edition, and condensed descriptions for all other APX programs.

fall 1983 edition

\$2.00 (APX-90009 Rev. D)

You can also order more copies of this edition.

**For credit card orders, use these
toll-free numbers: 800/672-1850
(California) or 800/538-1862
(elsewhere in Continental U.S.A.).
Or phone direct: 408/727-5603.**

Hardware

48K RAM EXPANSION KIT

\$110.00 (APX-90015)

With this kit you can upgrade the present memory capacity of your ATARI 400 Computer to 48 K RAM. Now you'll be able to use the more complex, memory intensive programs available for ATARI Computers, such as those for home management and systems/telecommunications. Your ATARI 400 Computer will then contain enough memory to use *any* program in the ATARI Home Computer and APX product lines. If you're an experienced assembler of electronic kits and have mastered soldering techniques, you can order the expansion board from APX and install it yourself. The kit includes detailed, generously illustrated installation instructions. Because of the level of skill required to install the RAM board, no warranty is available for boards installed by users. If you are not experienced, we recommend that your purchase the expansion board from your local ATARI Authorized Service Center, installed. (Price is slightly higher.) This product is not available through ATARI dealers.

DE-9S WITH DE 110963-1 SHELL (controller plug) \$6.25 (APX-90001)

This connector is suitable for the front joystick ports of the ATARI 400/800 Computers. Because you can program these ports for input or output, they're perfect for many specialized interfacing applications. These 9-pin, female connectors have solder-on, gold-plated contacts in a nylon insulator. To allow the connector to mate more securely with the computer's port, you may need to file the plastic shell slightly.

5-PIN DIN CONNECTOR

\$2.49 (APX-90002)

You can use this connector with the ATARI 800 Computer's video plug to connect your computer to video monitors, or to run the sound through a stereo system.

13-PIN I/O PLUG

\$9.95 (APX-90003)

You can use this connector, custom-designed for ATARI Home Computers, to build your own interface cables or devices...

13-PIN I/O SOCKET

\$4.95 (APX-90004)

This 13-pin, board-mounted connector with right-angle pins is the connector used inside ATARI Computers and peripherals. You can use it to build your own peripherals, extension cables, and interfaces.

DA-15P WITH DA110963-2 SHELL

(850 printer plug) \$5.95 (APX-90005)

Use this 15-pin, male connector to connect your ATARI 850 Interface Module to a compatible parallel printer. These connectors have solder-on, gold-plated pins in a nylon insulator.

DE-9P WITH DE110963-1 SHELL

(850 serial plug) \$5.49 (APX-90006)

Use this 9-pin, male connector to connect your ATARI 850 Interface Module to external RS-232 or current-loop devices. These connectors have solder-on, gold-plated pins in a nylon insulator.

ATARI Peripheral Contest!



\$24,000 in prizes for new and current APX authors

Now, in addition to prizes awarded to winners in the quarterly APX contest, your program could win an additional \$1,000, \$2,000, or \$3,000 in ATARI and APX hardware and software.

Starting with the spring 1984 APX quarterly contest, home programmers whose programs are accepted by APX could win additional prizes if their program makes use of one of Atari's new peripherals: the ATARI Trak-Ball, the ATARI 1200 Color Printer, or the speech synthesizer featured in the 1400XL and 1450XLD ATARI Home Computers, or any ATARI modem.*

Program authors who adapt their current APX products for use with peripherals are also eligible for prizes.

Each quarter the APX Board of Review will select three programs that make the best use of one or more of the

peripherals. These programs will be ranked in first, second, and third place, and will be awarded a prize of \$3,000, \$2,000, and \$1,000 in ATARI and APX products.

At the end of 1984, Peripheral Contest winners will compete for a grand prize of \$5,000 in cash.

New product entries to the contest will first be judged by the standards set by the APX Review Board for all APX submissions. (See article on page 16.) If the program meets these requirements and is accepted, it will then be judged for a Peripheral Contest prize.

Deadline for entries in the spring contest is January 1, 1984.

Contest entries will be judged by all of the following criteria:

1. Ease of use. Does the program allow easy use of the peripheral?
2. Active support. Does the relationship between the program and the peripheral(s) clearly enhance the program's usefulness or entertain-

ment value? Are the benefits of that relationship immediately clear to the user?

3. Creativity. Does the program make the most creative use possible of the peripheral(s)? Is the relationship between the program and its peripheral(s) original or unusual?

4. Flexibility. Does the program make use of more than one peripheral feature or option?

Specifications for each of the peripherals are available. To request a copy for the peripheral(s) you will be working with, phone the APX toll-free number, 800/538-1862 (continental U.S. except California), or 800/672-1850 (California). Or write to ATARI Program Exchange, P.O. Box 3705, Santa Clara, CA 95055.

* Includes the ATARI 855 Direct Connect Modem, the ATARI 830 modem, and the built-in, direct-connect modems that are part of the 1400 XL Home Computer and the 1450XLD Home Computer.

APX

ATARI® Program Exchange

P.O. Box 3705, Santa Clara, CA 95055

Bulk Rate
U.S. Postage
PAID
Permit No. 1
San Jose, CA

Address correction requested

ACE
CA 31601

GETAWAY!



You've got the loot ... now, **GETAWAY!** to a great new game from the Atari® Program Exchange!



It's all there! The squall of sirens, the crazy turns down endless city streets, the anxious search for ill-gotten gain, the race against time for a safe place to stash your cash! Now your gas tank is nearly empty and night is about to fall. The coppers are closing in fast. Before you learn again that crime doesn't pay...Quick! **GETAWAY!**

Ask for **GETAWAY!** at your local Atari software retailer, or order direct. Phone 800-538-1862, or 800-672-1850 in California. Or write Atari Program Exchange, P.O. Box 3705, Santa Clara, CA 95055.

Cassette	APX-10195 32K	\$29.95
Diskette	APX-20195 32K	\$29.95
For direct orders, add \$2.50.		

Programs by our users...for our users